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# NAVAL POSTGRADUATE SCHOOL

**MONTEREY, CALIFORNIA** 

# **THESIS**

# THE CHALLENGES STEMMING FROM DEMOGRAPHIC AND TECHNOLOGY ISSUES WITHIN THE UNITED ARAB EMIRATES

By

Mohammed Aldhaheri Mohammed AlNehayan

December 2010

Thesis Advisor: Leo Blanken Second Reader: Glenn Robinson

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Mohammed Aldhaheri Captain, United Arab Emirates Army Commissioning Course, Royal Military Academy Sandhurst, 2003 B.S., Embry-Riddle Aeronautical University, 2009

Mohammed AlNehayan
First Lieutenant, United Arab Emirates Army
Commissioning Course, Royal Military Academy Sandhurst, 2003
B.S., Embry-Riddle Aeronautical University, 2009

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# NAVAL POSTGRADUATE SCHOOL December 2010

Authors: Mohammed Aldhaheri

Mohammed AlNehayan

Approved by: Leo Blanken

Thesis Advisor

Glenn Robinson Second Reader

Gordon H. McCormick

Chairman, Department of Defense Analysis

## **ABSTRACT**

This research explores the internal security threats posed by both the disproportionate expatriate resident population and the impact of modern technologies within the UAE. More specifically, we analyze UAE government efforts to regulate and monitor the flow and activities of expatriates, as well as measures such as Emiratisation, which seek to replace workers with nationals within, select sectors of the private labor force. To balance the benefits and risks that are inherent with the application of technology, specifically communication related technologies, safeguards have been implemented and policies have been created that suit the interest of the culture to monitor and regulate the flow of information among the people. Based on our inductive exploration of the case of the UAE we generate specific policy recommendations such as to strengthen and move ahead with Emiratisation policy, to impose high values for charges related to the violation of the rules in relation to all security policies, and to impose a mandatory military service for all of the UAE nationals that would enhance national defense internal security response. In addition we have provided general arguments for future testing.

# TABLE OF CONTENTS

I.	INT	RODUCTION	
	Α,	SCOPE, PURPOSE AND PROBLEM STATEMENT	2
	В.	THESIS QUESTION AND IMPORTANCE	
	C.	RESEARCH METHODOLOGY AND THEORETICAL	
		FRAMEWORK	5
	D.	THESIS OUTLINE	7
II.	DEF	FINING THE ISSUE: THE DEMOGRAPHIC AND	
11.		CHNOLOGICAL CHALLENGES IN THE UAE	9
III.	INT	ERNAL SECURITY AND ECONOMIC GROWTH: THE CASE OF	
	DEN	MOGRAPHICS IN THE UAE	13
	<b>A.</b>	INTRODUCTION	
	В.	THE VALUE DERIVED COMPARED TO THE THREAT POSED	
	C.	EXPATRIATE COMMUNITY	16
		1. Disproportionate Number	16
		2. Reactive Measures: Effective Responses	17
		3. Laborer's Rights	
		4. Immigrations and Technology: Land, Port, Air	21
		5. Bidoon	
		6. Threat of Infiltration	25
	D.	ADDITIONAL NON-CITIZEN-BASED THREATS: TERRORIST	
		AND ILLEGAL ORGANIZATIONS	26
		1. Threat Posed	26
		2. A Unique Atmosphere: Hawala	28
		3. The Proactive Response	29
		a. The Banking Industry	29
		b. Cooperative Measures Within the Region and Beyond	<i>30</i>
	<b>E.</b>	EMIRATISATION	<b>32</b>
	F.	CONCLUSION	<b>36</b>
IV.	TEC	CHNOLOGY'S EFFECTS ON CULTURE AND SECURITY IN THE	
_ , ,		E	39
	A.	INTRODUCTION	
	В.	TECHNOLOGY AND ITS IMPLICATIONS	
	C.	OVERVIEW OF EMERGING TECHNOLOGIES IN THE UAE	
		1. Communication Technologies	
		a. Mobile Communications, Instant Messaging and Video	_
		Conferencing in UAE	<i>42</i>
		b. Internet Communications, Wireless, and Broadband	_
		Technologies	<b>4</b> 3
		c. Social Networking	
	D.	EMERGING TECHNOLOGIES: BENEFITS, USES, AND	_
	-•		15

		1. Economic Benefits	.46
		2. Impact of Technology on UAE Culture and Security	
	<b>E.</b>	DISADVANTAGES OF EMERGING TECHNOLOGIES:	
		PROBLEMS AND CHALLENGES	.48
		1. Cultural Backlash	
		2. National and Regional Security Concerns	
		3. Terrorism	
		4. Protecting Foreigners	
		5. Keeping Banks Secure	
	F.	POLICY PERSPECTIVES IN THE UAE	
		1. Social Capital Perspective	
		2. Technological Acculturation Perspective	
	G.	MONITOR VS. SHUTDOWN	
	Н.	CONCLUSION	
<b>▼</b> 7	CON		
V.	CON	CLUDING RECOMMENDATIONS	,57
LIST	OF RI	FERENCES	.63
A DDI	FNDIY	UAE: THE PLACE, THE PEOPLE, AND THE GOVERNMENT	73
AIII	A.	THE PLACE	
	В.	THE PEOPLE	
	в. С.	THE GOVERNMENT	
	C.	1. Traditional	
		2. The Formation of the United Arab Emirates	
		3. Political Infrastructure	
		b. A Secure Country	19
INIT	TAT DI	STRIRITION LIST	21

# LIST OF FIGURES

Figure 1.	Conceptual framework	6
Figure 2.	Emirati Population as Compared to Expatriates (From: UAE Census)	
Figure 3.	UAE Real GDP (From: World Bank & Gonzalez, 2008)	
Figure 4.	Labor Force (From: CIA, 2010, "Middle East: UAE")	
Figure 5.	GDP – Composition by Sector (From: CIA, 2010,"Middle East: UAE)	16
Figure 6.	UAE Immigration Outlets (From: Ministry of Interior, 1997)	22
Figure 7.	Iris Recognition (After: LGIris.com)	
Figure 8.	Standard System of Hawala (From: Berti, 2008)	29
Figure 9.	UAE Topographical Map (From: wikimedia.com)	

# LIST OF TABLES

Table 1. Comparison of Internet Indicators, UAE and UK (From: TRA, 2010)......45

# LIST OF ACRONYMS AND ABBREVIATIONS

**AD** Anno Domini

**ATM** Automated Teller Machine.

**BC** Before Christ

**CEO** Chief Executive Officer.

**CIA** Central Intelligence Agency.

**CNIA** Critical National Infrastructure Authority.

**DH** UAE Dirhams.

**ECSSR** Emirates Center for Strategic Studies and Research.

**EIA** Emirate Identity Authority.

**FNC** Federal National Council.

**GDP** Gross Domestic Product.

GCC Cooperation Council for the Arab States of the Gulf.

**ICT** Information and Communications Technology.

**IEEE 802.16e**. Mobile Broadband Wireless Access System

**USB** Universal Serial Bus

**INSEAD** Institut Européen d'Administration des Affaires (European Institute for

**Business Administration**)

**ISNR** International Society National Resilience Exhibition and Conference.

**IT** Information Technology.

**ITU** International Telecommunication Union.

**NRI** Network Readiness Index.

NMC National Media Council.

**OSAC** Overseas Security Advisory Council.

**RF-ID** Radio Frequency Identification Cards.

**TRA** Telecommunication and Regulation Authority.

**WAM** Emirates News Agency.

**WiMAX** Worldwide Interoperability for Microwave Access.

**UAE** United Arab Emirates.

UK United Kingdom.

**U.S., USA** United States of America.

3G International Mobile Telecommunications-2000 (IMT—2000), better

known as 3G or 3rd Generation.

**4G** Fourth generation of cellular wireless standards.

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### I. INTRODUCTION

Security, according to Fischer and Green, "implies a stable, relatively predictable environment in which an individual or group may pursue its ends without disruption or harm and without fear of disturbance or injury" (Fischer, 2004, p.21). Internal security specifically refers to the state of the social and physical environment within a defined border and is of great importance to the well-being and longevity of a nation state. The case of the United Arab Emirates (UAE) is an extreme example of the threats from everchanging demographic and technological advances. For the UAE a delicate balance has been maintained between the risk that these threats pose and the benefit that has been derived. The desire to maintain positive growth that is challenged by internal security threats is not only specific to the UAE, rather the challenge holds global importance because these issues are relevant to most countries since the advent of globalization.

The evolution of countries worldwide has become increasingly rapid due to globalization. Global innovation is evident as seen within the UAE infrastructure: the improvement of trading, construction of airports, strategic hubs, and other development. According to Godwin, "globalization for the UAE has resulted in a mix of challenges some of which are faced by developing nations and the rapid Westernization of traditional culture" (Godwin, 2006, p. 5). This study was proposed to analyze the internal security issues that are specific to the UAE and relevant to globalization, which consist of the influence that expatriate resident workers and modern technology have on society, culture, and economy. The influence of globalization on the UAE has increased the need for the government to ensure stability and good governance. Though neither of these internal security threats at present create an immediate threat of destabilization, there is a need to systematically identify and address all of the probable issues in order to maintain the proactive strategy of the UAE government. With the appropriate approach, the UAE can get the maximum benefit from globalization as well as keep its current governance and cultural identity intact. The globalization trend is moving the world into a borderless state where the internal security of countries is threatened by the influence of other countries, their governments, and their cultures.

Globalization brings forward issues on sovereignty. The strategic importance of internal security is an integral part of good governance. According to Smith and Naim, (2000, p. 61), "globalization mocks the state and demands more of it, validates democracy and subverts it... in a world of globalization, new ways of governance are required." Globalization has brought about changes in the UAE. The economy has prospered and has expanded its industries outside the oil sector. The importance of internal security in the UAE and its relation to globalization is partially a result of the growing involvement and interaction of the UAE with other countries worldwide. The UAE has maintained a collaborative approach with other countries in an effort to remain current and proactive in the face of rapidly evolving threats due to globalization. If the UAE is able to remain balanced in their flexibility and in keeping their culture and shared history at the forefront of their consciousness to ensure solidarity among the people and the government, the country should be able to progress and move successfully into the future and face challenges that arise from threats to the internal security of the country.

## A, SCOPE, PURPOSE AND PROBLEM STATEMENT

This thesis identifies two main sources of threat to the internal security of the UAE: the expatriate resident population and modern technologies, and their impact on the UAE as a nation—the society, its culture, and the economy. In addition to identifying the known threats, this thesis looks to provide an overall concept of how these pose a threat, whether or not there are benefits to maintaining their presence within the nation state, and how the government addresses these challenges in maintaining the balance between the risk and derived benefit.

The purpose of this thesis is to examine all information pertaining to the two major categories of threat to the internal security of the UAE. Concluding remarks will follow each chapter and will be provided at the closing of the thesis. The purpose of these remarks is to identify the impact of the proactive measures and reactive capabilities of the government to sustain internal security within UAE, as well as to provide an insight to possible measures that will improve the potential of sustaining the UAE's internal security.

According to Hussain (2009, p. 3), "international migration can by itself constitute a threat to international security when it is of massive, uncontrolled character" and this appears to be a major concern for countries like the UAE where the rate of expatriation is relatively high. As the UAE is a region with greater global importance based on the vast opportunities for investments and growth, any threat to the security status of the region would adversely affect the attractiveness of the region. Because of this, the government is highly sensitive to the issues related to internal security. One probable threat to the internal security of the region is considered as the presence of large number of expatriates in the region as they form a major category of unskilled and skilled labor force, making the UAE economy dependent upon them. Any unrest or instability in the expat's homeland can therefore cause severe repercussions in the UAE. Uncontrolled rise in the influence and power of expats in the economic matters of the region also can cause serious security issues in the region (Cordesman, 1997). Uprisings of any kind or infiltrations of organized criminal organizations can happen if migrations are not properly regulated. Furthermore, in this age of globalization use of modern technology is essential in all areas, but the penetration of technology into the governmental and business framework and functioning can make the systems more vulnerable to global attacks. Misuse of technology can also upset the traditional society of the UAE and its culture and can also cause major political unrest.

# B. THESIS QUESTION AND IMPORTANCE

What are the challenges to maintaining the internal security of the United Arab Emirates?

This question is important not only to the UAE government, the Emiratis and other residents, but to the entire world. It is commonly acknowledged that the UAE represents stability and positive growth, and is gaining its importance across the Middle East as well as globally. One reason for this is that the UAE is an example of a modern yet traditional society that is not a democracy however remains well balanced and successful as a nation state.

The UAE has rapidly become involved in global economics through corporate, governmental, military, and personal investment, in addition to having a wealth of one natural resource that is in high demand. Since the late 1960s,

The crucial contribution that the Gulf's energy exports make to the world economy is by itself sufficient to place the region's security at the top of the U.S. list of strategic priorities, because even temporary disruptions in the supply of oil flowing from the Gulf or increases in oil prices can cause lasting damage to the American and global economy by boosting inflation and depressing growth, investment and employment. (Korb, 2005, p. 3)

The UAE is considered to be a critical affiliate in trade by countries worldwide. The UAE is also strategically located in the middle of trading exchange avenues between East and West. With this, the UAE plays a major role in keeping up to its growing economy by reinforcing its corporate, governmental, military, and personal investment. Having an effective infrastructure and system in place, The UAE might be able to support globalization. According to Sassen, "global markets and transnationalized corporate structures have the potential for producing fundamental changes in the systems of the nation" (1995, p. 25). These changes toward globalization call for good governance towards a stable internal security in the country.

As of 2007 the UAE was exporting 2.7 million barrels of oil per day, the third in export in the world; as of 2010 had a proven reserve of 97.8 billion barrels, the sixth largest reserve in the world (CIA, 2010, "Middle East: UAE"). International interest in the UAE is also due to expatriates making up a part of the resident population within the country or that pass through as tourists.

This study may serve as a useful reference to inspire any system of governance by providing an overview on how the government of the UAE currently addresses threats to internal security as well as recommending innovative ways to manage these challenges on a national level.

### C. RESEARCH METHODOLOGY AND THEORETICAL FRAMEWORK

Based on the research, the following hypotheses have been formulated:

- 1. The disproportionate number of expatriates pose a threat to the internal security of the UAE through potential:
  - Backlash from destabilization within the laborer's respective countries:
  - Loss of influence within the economic sector due to the overwhelming and disproportionate number of expatriate entrepreneurs and private sector businessman;
  - The disproportionate number of expatriates within the UAE creates an environment that lends itself to possible infiltration by terrorist and other illegal organization members into the private and government workforces.
- 2. The UAE faces a number of internal security threats with the implementation of modern technology:
  - Technology allows the phenomena of globalization to affect the citizens and culture of the UAE;
  - Technology implemented in assistance of government and security functions may become vulnerable to attack through infiltration or a breakdown of technological safeguards;
  - Potential civil unrest that may occur due to strict regulations and/or monitoring.

This research study is based on the principles of phenomenological philosophy, as the assessments are mostly qualitative in nature. Heuristic case study research was used to develop new hypotheses, which was evaluated qualitatively during the research study (George & Bennet, 2005). Inductive approach or logic was found to be more suitable for this research study as there were no specific theories in this research context that can be tested or verified. For this research study outlier cases were observed and assessed as these types of cases were more suitable and applicable in the current context. The major internal security issues of UAE that were considered for this research are found to be unique to the UAE and hence considered as outlier cases. The two independent variables that were identified to have the greatest possibility for causing security concerns in the region are demographics and modern technology. The demographics indicate that approximately 85% of UAE citizens are expatriates and 15% are Emiratis, which is a

rarity in the world and hence a good choice for study using the heuristic case method as research methodology. For this research, mostly data from secondary sources were utilized; data from a few primary sources were also included to make the outcome more valid and applicable. Secondary data were collected from the internet, books, and other print documents related to internal security from the UAE. Primary sources were used as well drawing from the personal experience of those within roles that support the internal security of the UAE.

The relationship between the dependent and independent variables for this work are illustrated and briefly explained below in Figure 1. The independent variables identified for this research study involve the UAE's disproportionate expatriate resident population and technology. They in turn affect the dependent variable, the internal security threat for the UAE.

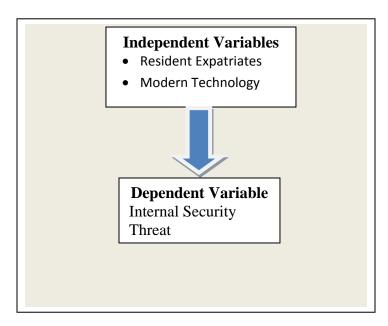


Figure 1. Conceptual framework

#### D. THESIS OUTLINE

In this study, Chapter II will address how the UAE's government displayed the ability to take a balanced approach to the challenge of creating an effective government and how a similar approach taken towards the current challenges presented by economic growth and globalization may be beneficial to maintaining internal security.

Chapter III will discuss the link between internal security and economic growth in the UAE, and whether the value derived is more than the threat posed by the expatriates. It will examine the resident expatriate community and illegal immigrants in relation to the threat they pose and measures taken by the government to maintain internal security and it will present the Emiratisation policy that is in place in order to reduce the threat on internal security by expatriates.

Chapter IV will explore the use of emerging technologies in the UAE and the threat on internal security by studying the implications of technology, the benefits and disadvantages, problems and challenges which arise due to technology, and how monitoring and controls affect society, culture, and internal security in the UAE.

# II. DEFINING THE ISSUE: THE DEMOGRAPHIC AND TECHNOLOGICAL CHALLENGES IN THE UAE

History is a continuous chain of events. The present is only an extension of the past.

(UAE Interact, 2005, Sheikh Zayed)

Economic growth and globalization present unique challenges to the UAE government such as how to embrace these positive changes while maintaining internal security. The approach that the rulers took—to effectively balance the risks and benefits that were derivative of implementing various forms of government—is reflective of the capability of the UAE governmental policy makers to progressively approach current issues. At present, the form of government is not at issue, nor is how to create an impressive growth within the economic sector; rather the issues relevant to the government today are how to address the ever-evolving threat posed by the demographic reality of the country and the implementation of technology within the UAE, which is on par with other powerful modern countries. These threats were likely accepted upon making the decision to catapult the country into economic success and growth as a world leader. This chapter addresses how the UAE government displayed the ability to take a balanced approach to the challenge of creating an effective government and how a similar approach taken towards the current challenge of balancing the risk and benefits inherent to maintaining internal security may be beneficial.

The founding father Sheikh Zayed Bin Sultan Al Nahyan, with great foresight, while establishing the government under which the seven Emirates are now united, stressed the importance of maintaining strong ties to the historical and cultural identity of the region in order to ensure the internal stability and longevity of the then emerging nation state through unity: "the importance of unity [is] a vital necessity for providing a better life to the people, [and] for ensuring stability in the country" (UAE interact, 2005, Sheikh Zayed). This sense of unity if maintained should allow the UAE to face the challenge posed by globalization without losing the identity that makes the country unique. Currently the UAE government's concerns regarding internal security are

interrelated with the desire to maintain strong ties to the past all the while maintaining the modernity that has allowed rapid growth and development. Now, more than ever, the relevance of certain challenges to internal security are increasing due to the influence of globalization. Two major challenges that the UAE faces are generally those related to the large resident expatriate workforce that comprises much of the country's demographics, as well as the influence of technology within the government and culture, as it has become an important and necessary part of growth in the modern world.

The structure of the government reflects the UAE's ability to balance the risk and benefits inherent in a global setting. It was with Sheikh Zayed's foresight that the government blended the desire to maintain traditions and to become an ever-progressive and modern state of power. Prior to the onset of globalization the UAE focused on establishing a basis from which the country would grow that was founded upon a blend of positive methods of governance from the country's rich past and effective methods of governance that are more modern in comparison.

[The rulers] deliberately chose not simply to copy from others but, instead, to work towards a society that would offer the best of modern administration, while retaining the traditional forms of government that, with their inherent commitment to consensus, discussion and direct democracy, offered the best features of the past. (UAE, 2007. p 47)

The *majlis*<sup>1</sup> which are still in place within each of the Emirates are an example that "the well-tested traditional methods of government in the United Arab Emirates have been able to retain both their essential relevance and unique vitality, and they continue to play an important role in the evolution of the state today" (UAE, n.d., p 47).

In order to effectively continue on the path of assent, however, the UAE must prove successful in managing their internal security threats. In regards to demographics, the UAE has, as highlighted in the following chapter, allowed an influx of expatriate resident workers into the country in order to support the country's economic growth. The UAE lacks a national population that is able to support the economic growth that has occurred therefore the government has accepted the expatriate workforce as a risk that is

<sup>&</sup>lt;sup>1</sup> For more information about the UAE, including a definition on majlis, please refer to the Appendix.

outweighed by the benefit of growth, at least for now. There are already policies and security measures in place that are meant to curb further large influxes of workers entering the country; in addition, the UAE has established policies in order to replace expatriates holding positions that the new generation of Emiratis are able to replace as they graduate from higher learning institutions. This policy is referred to as Emiratisation. The implementation of Emiratisation, however effective, will not substantially reduce the number of expatriate workers because the majority of the workers are holding blue collar or labor related positions and the Emiratis are generally only trained for executive or other white-collar level positions. Because it is not possible to immediately replace the expatriate labor force, the UAE has put security measures in place, some of which have made it a leader in the area of security technologies.

In addition to the immediate threat that is posed by the presence of the large expatriate workforce, the UAE faces another challenge that is more closely interrelated to globalization, the real threat posed by modern technologies. Modern technology has many benefits such as the enhanced ability to rapidly travel and communicate, expedite business transactions, and provide effective government services; however, maintaining the risk so that it does not become more than a threat is challenging. The challenges that are inherent with the use of technology include international and regional security concerns such as terrorism and keeping banks secure, as well as protecting the social and cultural infrastructure. Monitoring technology has become a necessary method of balancing the risk and benefits of technology use for all countries not only the UAE, yet monitoring may result in cultural backlash, another form of threat posed by the implementation of technology. The UAE has implemented measures beyond monitoring to mitigate the risk as discussed in depth within Chapter IV.

The two major challenges that the UAE faces are related to the resident expatriate workforce and implementation of technology within government and culture. The importance of maintaining ties to the past was stressed by the country's founding father. In the past leaders in the UAE have displayed the ability to take a well-balanced approach when faced with challenges where risks and benefits must be weighed. If the UAE is able to maintain a similar approach as it continues to grow and emerge as an influential

country and world player, it should be able to effectively manage challenges at present and in the future. In the following chapter we explore the demographics issue and we find that the UAE is taking a number of proactive measures in order to ensure that the expatriate resident population remains stable and free from those wanting to commit illegal or terrorist acts (e.g., the implementation of IrisGuard and RF-ID), and to ensure that their national population becomes and remains active within the economy and the private sector, (e.g., using Emiratisation.) In the fourth chapter, we turn to the challenges of technology and we find that the UAE has adopted policy perspectives and approaches to diffuse the threat posed by technological advancements and thereby enjoy beneficial results for the UAE economy, government, and people.

# III. INTERNAL SECURITY AND ECONOMIC GROWTH: THE CASE OF DEMOGRAPHICS IN THE UAE

#### A. INTRODUCTION

The United Arab Emirates faces a number of internal security challenges. The major security challenge that dominates a discussion of the UAE internal security is the large resident expatriate workforce that is invaluable to the country's economy. For the UAE this relationship between economy and security is complicated as the economy is interdependent with a major threat to security. According to estimates, the population of UAE in 2010 is 8.2 million, only roughly one million are UAE citizens. (Al-khouri, 2010, p. 2). The disproportionate number of expatriate residents has increased dramatically as the UAE economy has grown. The presence of the expatriate population has given rise to concerns due to the security threat that is posed, as substantiated in past events such as in 1994 when the UAE experienced chaotic backlash in response to the destruction of a Mosque in Ayodhya, India and the exploitation of the banking system by illegal organizations in support of 9/11. The UAE has taken a number of measures, as will be discussed in this chapter, in order to minimize the proven threat and continues to make great efforts to remain progressive and proactive in anticipation of future issues arising from the expatriate population. How is the business-minded UAE government able to remain progressive with their approach to the implementation and maintenance of the country's security, all the while maintaining economic growth?

This chapter seeks to review the pertinent information surrounding this major threat and how the UAE has currently dealt with it in order to analyze how the UAE will be able to maintain their current or an increased level of internal security while also maintaining positive economic growth. The following discussion provides an overview of how the source of the threat and the economy are interrelated. It shows policy challenges that derive from the expatriate resident population within the UAE, which involve issues regarding laborer's rights, immigrations, the real threat of infiltration, and the threat of terrorist and illegal organization activity. It also discusses the strategic approach to minimizing the threat through the application of Emiratisation. Through decisive reactive

responses and the application of insightful proactive measures, the UAE has been able to successfully continue positive economic growth while maintaining internal security thus far. So long as the UAE government is able to remain responsive, progressive, and foresighted, the country will be able to move forward sustaining a future growth and an environment of stability.

#### B. THE VALUE DERIVED COMPARED TO THE THREAT POSED

The cost of growth is not without any risk. The internal agencies would not be supported financially if it were not for the one ever-present threat to the internal security of the Emirates: expatriate workers and foreign-owned businesses. Without a stable economy and without any wealth, a country likely would have little to no ability to ensure that security is maintained within its boundaries. The UAE in this respect is not unlike any other country. In the UAE, which has a strong basis for wealth in the natural resource of oil, the economy and population have rapidly expanded making the need for well-trained and technologically equipped security sectors a necessity. Although the UAE has a large amount of revenue coming from oil, as displayed in Figures 2–5, the dramatic increase in economic prosperity is directly interrelated to the exponential increase of expatriate residents, so security is still difficult to maintain.

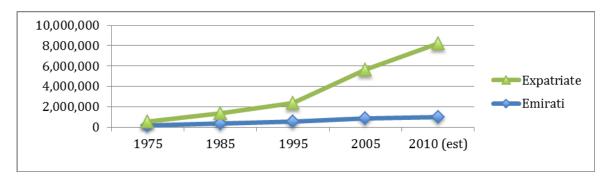


Figure 2. Emirati Population as Compared to Expatriates (From: UAE Census) <sup>2</sup>

<sup>&</sup>lt;sup>2</sup> Numbers are based on UAE Census reports; the 2010 estimate is based on the government published numbers on UAEinteract.com. And, from UAE, Ministry of Economy (2008).

Figure 2 depicts the population growth in ten-year intervals since 1975. We are able to see that the native Emirati population has maintained a gradual yet steady increase, whereas since 1995 there has been a dramatic increase in the number of expatriate worker residents within the UAE. It is when comparing Figure 2 to Figure 3 that we are able to see the correlation between the drastic increase in GDP as of 1995 and the rise in the number of expatriate worker residents that began around the same time.

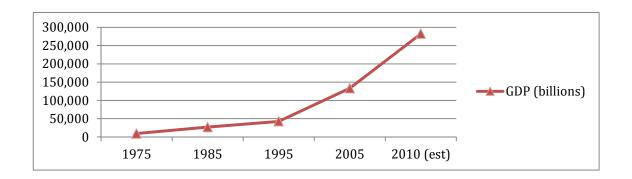


Figure 3. UAE Real GDP (From: World Bank & Gonzalez, 2008)<sup>3</sup>

The UAE has successfully diversified their economy. Oil is no longer the main source of revenue. Figure 5 depicts the breakdown of the GDP based upon a 2009 estimate. Nearly half of the GDP of UAE is made up of service revenue. The service sector is the major employer of the UAE expatriate workforce (see Figure 4); the Emiratis are rarely employed within the service sector, rather they hold mainly government positions and, less frequently, they are employed by the private sector as will be discussed under Emiratisation.

<sup>&</sup>lt;sup>3</sup> The Real GDP numbers were as reported by World Bank, from 1990–2010 the estimate is based on the expected 8% growth as compared to the 2009 numbers. The Real GDP number were as reported by Gonzalez, &Goldman. (2008, pp. 94) From 1975–1989.

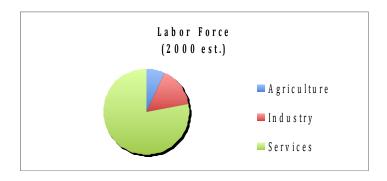


Figure 4. Labor Force (From: CIA, 2010, "Middle East: UAE")

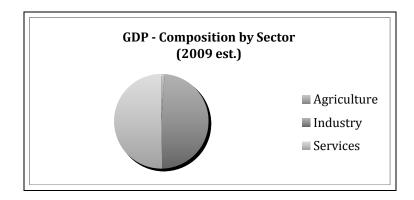


Figure 5. GDP – Composition by Sector (From: CIA, 2010,"Middle East: UAE)

As Figures 2–5 depict, there is a distinct and unavoidable relationship between the GDP of the UAE and the levels of expatriate resident workers that are maintained within the country. Currently, as will be discussed later in this chapter, the government of the UAE balances their need and desire to maintain security, economic growth, and control over their country and workforce in order to ensure the longevity of their country, culture, and race.

# C. EXPATRIATE COMMUNITY

## 1. Disproportionate Number

As early as the 1990s, it has been highlighted that there is a need for the UAE to take "effective measures to deal with the longer term problem of growing dependence on foreign workers" (Cordesman 1997, p. 388), because "foreign labor is regarded as the main potential source of internal unrest" for the country (Cordesman, 1997, p. 377). The

warning from international academia was not heeded as previously depicted in Figure 1 and from this comes the source of the preceding discussion of reactive and proactive measures taken by the government of the UAE in an effort to maintain stability in the face of the country's now established dependence on expatriate workers. In 2007 approximately three million foreign workers were employed by 260,000 organizations, representing more than 200 countries (UAE Embassy, 2010). By the spring of 2010, according to the National Media Council (NMC), "The population of the UAE [had] reached 8.19 million and is continuing to grow at a rapid rate despite the global downturn" (UAE Interact, 2010), According to estimates the population of UAE in 2010 is 8.2 million; only roughly one million are UAE citizens (Al-khouri, 2010). More than 90 percent of the private-sector labor force consists of expatriate workers (UAE Embassy, 2010), "The largest number of these – 1.75 million – come from India" (BMI, 2010).

The disproportion in the number of expatriate workers as compared to nationals complicates how the government is able to devise a reasonable approach to phasing out expatriates. It seems with numbers such as these there is little national human resource available. Realistically 1 million people cannot take on the role of 7 million. Because a total replacement of the expatriate population is not feasible, the proactive measures that the government has chosen to take ensure that while the expatriate community is necessary and present, they are not exploited nor is control over their behavior lost.

# 2. Reactive Measures: Effective Responses

The Asian expatriate worker community was the first to substantiate the idea that the large number of expatriate workers was a threat to internal security. In 1994 chaos ensued in response to the destruction of a Mosque in Ayodhya, India. Protesting was controlled in Dubai through the means of police deployed with riot control gear and armored vehicles. Shops were closed in Abu Dhabi and Sharjah. In Al Ain the deportation of over 100 rioters resulted due to illegal demonstrating and the destruction that was caused (Perry, 2003). The UAE government seems to have been underestimated

by the Asian workers; the latter's actions were radical and uninhibited whereas the response by the UAE government was decisive and successful and such a large-scale situation has not since occurred.

The double-edged sword of such a large number of expatriate workers residing within the country is not only made up of balancing the rights of the workers and the benefit that they provide the economy with ensuring that means of riot control are in place. It is certain that riot-protection measures are in place in the UAE as reflected in the aforementioned 1994 incident. After more than a decade the UAE once again proved itself to be competent in this area when on July 4, 2008, 3,147 workers were detained as a result of riots at a ceramic factory in Ras Al Khaimah. The occurrence being an issue of law and order was handled by the Ministry of Interior, after being reviewed by the Ministry of Labor. The detention concluded in the release of around 3,000 of those detained (Indo, 2008).

The issue of persons entering into the UAE without a visa is as much a threat as those legal expatriates that cause threats from within such as those who have left their job and seek positions illegally elsewhere. In the Emirate Dubai "People hiring maids who have absconded from their original employers will face a fine of Dh50,000 while hiring an illegal worker or maid will incur a Dh100,000 fine and a jail term." (UAE HR Zone, 2010). Major-General Mohammad Al Merri, Director General of The Residency and Foreigners Affairs Department in Dubai stated, "If any absconding maid or worker wants to work illegally for you or someone you know, you should immediately and quietly contact the Amer service on 8005111 who will come to your home or work place to catch them without any trouble or noise" (UAE HR Zone, 2010).

Illegal immigration is considered a major threat in itself to the stability and security of the UAE. The seriousness of illegal immigration is a threat to "the country's traditions," in addition to causing numerous legal problems, according to Dr Ali Bin Abdullah Al Ka'abi, Minister of Labor (WAM, 2007, "Amnesty helps"). At the end of 2007 the UAE government gave an opportunity for amnesty to illegal laborers in an effort to minimize the threat by allowing the government to trace and count those that became legalized. At the end of the amnesty period, the Cabinet had adjusted the status of

176,000 workers. These workers either adjusted their status from illegal to legal or received "out passes" to leave the country. According to Lieutenant General Sheikh Saif bin Zayed Al Nahyan, "As the amnesty has expired, hefty punishment will be inflicted on violators and those who violate the security and safety of the country...." He continues by saying, "the existence of [an] illegal workforce poses negative effects on the UAE's economic, social, security and humanitarian aspects," and "the amnesty decision was a genuine opportunity to put things on the right track" (WAM, 2007, "Amnesty decision").

# 3. Laborer's Rights

The UAE is careful in its dealings with expatriate workers. The government's goal is to ensure that the expatriate community is treated fairly and equally in order to avoid instigating issues among the expatriates or generally within their community. It is a humanitarian and strategic security stance to take in order to avoid civil unrest. The UAE Law No. 8 of 1980, as amended by Law No. 12 of 1986 (the "Labor Law") is aimed at protecting the foreign laborers inside of the UAE (Ministry of Labor, 2010). In addition, "Emirate-level governments are also taking steps to protect the rights of foreign workers." (UAE Embassy, 2010). There have been instances where an employer generally mistreated expatriates; for example, one of the major issues facing the Ministry of Labor is the need to resolve disputes for unpaid wages. For example, in 2007, the Ministry of Labor discontinued permits for a total of 1,300 employers that had failed to pay their workers (Ministry of Labor, 2007, Labor Report). The Ministry of Labor and Social Affairs holds the authority to both review industrial and labor contracts as well as resolve "work-related disputes through conciliation committees or special labor courts" (Cordesman, 1997, p. 367).

The UAE submits reports such as the 2007 report on "The Protection of the Rights of Workers in the United Arab Emirates" to the United Nations at the Universal Periodic Review in order to "share progress and obtain feedback from other states" (U.S. Department of State, 2009, "Human Rights Report UAE"). According to the UAE Embassy located within the United States, the following are measures that have been active in order to ensure that workers' rights are being protected:

- The Ministry of Labor now requires firms to provide audited statements demonstrating that wages have been paid.
- In 2007, the UAE government forced businesses to pay 52 million dirhams (\$14.2 million) in unpaid wages, after legal action.
- In 2007, the Ministry of Labor suspended permits of 1,300 companies for late payment of workers' wages, while 545 institutions found guilty of nonpayment of wages had activities frozen or suspended.
- In November 2007, the Ministry of Labor collaborated with some construction companies to provide a 20 percent pay raise for workers to accommodate increasing costs.
- The number of inspectors dedicated to labor has grown to 700.
- A new, 24-hour, toll-free hotline allows workers to file complaints, check status of applications, and ask questions. (2010)

In addition to labor rights that have been enacted, simple measures such as allowing religious freedom and ensuring the fulfillment of basic needs, most expatriates "receive either employer-provided housing or housing allowances, medical care, and homeward passage from their employers" (Cordesman, 1997, p. 307), are pivotal when considering how to maintain such a large number of expatriates and keep them satisfied Bilateral relations have been formed with the countries of citizenship of the expatriates such as those with the countries of Nepal, India, Pakistan, Indonesia, and Bangladesh as a means to provide the country with legal expatriate workers in order to limit the number of illegal workers within the country. These bilateral relations are an example of one of the many ways that the UAE government works collaboratively with other nations that share a similar interest of ensuring that the internal security of their country is maintained. The bilateral relations were created to ensure the interests of both countries are served, and deal primarily with integration and immigration issues.

# 4. Immigrations and Technology: Land, Port, Air

Transnational security threats are evolving and increasing in sophistication and frequency, necessitating the most efficient levels of border security. International passenger traffic is growing annually at a rapidly growing rate, demanding constant assessment and evaluation of security methods employed by immigration, airport and customs authorities all over the world...

("Dubai Conference on Air Port Security," 2010).

Cordesman (1997) describes the geography of the country:

The UAE is a moderate-size state by Southern Gulf standard. It is roughly the size of Maine. It has a land area of about 83,600 square kilometers. Its borders [are]...1.448 kilometers of coastline on the [Arabian] Gulf...586 kilometers with Saudi Arabia and 410 kilometers with Oman (290).

There are seven Air Outlets, fourteen Sea Outlets, and six Land Outlets where entry and exit are permitted (see Figure 6). The Executive Regulations of Entry and Residence of Foreigners Law and its Amendments set forth visa-related issues and policies related to issuance and those applied to deportation and reentry for those illegally within the country or those who have violated a law.

The UAE has in place strict policies governing the issuance of citizenship and work visas in an effort to preserve the culture and to maintain controlling interest over their country. The UAE does not take lightly the value of citizenship in their country; in order to become a citizen of the UAE one must be 1) born a national, 2) a child of an Emirati male, although this is not a guaranteed right, or 3) married to an Emirati male, (however, obtaining citizenship in this manor is not likely.) Citizenship may also be granted due to outstanding service in support of one of the Emirates or the UAE itself.

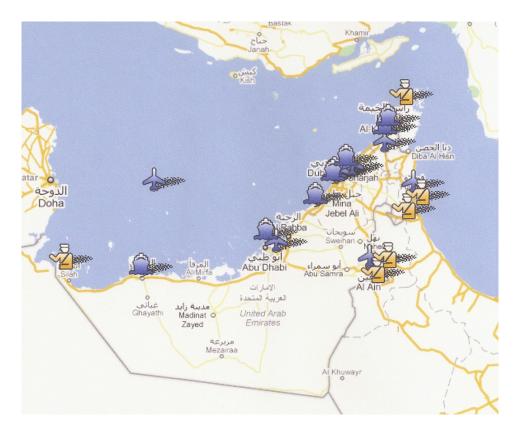


Figure 6. UAE Immigration Outlets (From: Ministry of Interior, 1997) <sup>4</sup>

Obtaining a visa is not as impossible as obtaining citizenship. The type of visa needed for entry "depends on several different factors such as your nationality, the purpose of your planned visit and its planned duration" (NMC, 2010 "Visas and Immigration"). An employer or sponsor is required to file for a work visa on a workers behalf. To many, a work visa to enter into the UAE is a highly valued item, thus comes the issue of illegal immigration (NMC, "Visas and Immigration"). A work visa may be granted after a vigorous background check. Those persons are able to remain within the country for the extent of that visa until expiration, when they are able, through their employer, to gain a renewal, or until they are expelled.

<sup>4</sup> Air Outlets: Abu Dhabi, Al Ain, Das Island, Dubai, Sharjah, Ras Al Khaimah, Fujairah Land: Abu Dhabi (3), Dubai, Sharjah, Ras Al Khaimah.

Sea: Abu Dhabi (2), Dubai (5), Sharjah (2), Ras Al Khaimah (2), Ajman, Umm Al Quwain, Fujairah.

Generally, a resident legally within the country may be expelled: "A) If the foreigner was adjudicated and court award recommended its deportation, B)...lack for reasonable sources of sustenance, C) if in the opinion of security authorities that such deportation serves the public interest, public security or public morals" (UAE Ministry of Interior, 1997, Article 23). Once deportation occurs, Articles 28 and 29 respectively may apply. Article 31 dictates that "Any foreigner entering or staying within the country [in violation of a deportation order or illegally] shall be subject to imprisonment not exceeding four months and a penalty of UAE not exceeding two thousand or either" (UAE Ministry of Interior, 1997). In addition to having comprehensive policies and regulations governing the expatriates employed, the government has worked to place strict regulating controls on employment agencies and worked with the expatriate countries of origin in order to attempt to limit the flow of illegal immigrants.

Due to the bilateral agreements and the ability to better track the flow of immigration through the application of modern technology, now more than ever illegal immigration and or violations of laws or policies that result in expulsion are costly to those individuals who commit the infraction. With current technology in place to complement the proactive policies, greater control is maintained over the flow of expatriates into and leaving the country. After the policy has become reactive in nature, as it has been applied to an individual's situation, the technologies such as the iris recognition scan, the smart card, and e-government (some aspects apply) are useful.

The UAE has contracted with IrisGuard to install the world's first and largest Iris Recognition at all of the major and auxiliary points of entry for immigrations (Find Biometrics, 2009). In order for these stations to be effective they must have an existing database with recorded scans of persons banned from reentering.

The components of the system are: Expellee Deportation Centers: Where expellee's Iris and other information are enrolled; Central Expellee Iris Database: Where the Iris information from all the Deportation Centers throughout the country are synchronized; Iris Finder Remote Workstations: ...remote recognition stations capable of handling large numbers of users. Searches are sent to the central database and results are returned in real-time. (IrisGuard Incorporated. n.d.).

The UAE has locations where iris scans are inputted into the system (Find Biometrics, 2009). By 2009 there were 1.7 million recorded iris scans entered into the database. In 2008, Dubai's Iris scan alone helped to arrest 54,000 suspects (UAE Interact, 2009). By the time of his interview in 2009, the IrisGuard CEO stated that there had been "over 350,000 foreigners (deportees) [that] have been apprehended trying to re-enter the UAE often carrying false travel documents," this is since the implementation in 2001 (IrisGuard Inc., 2009).

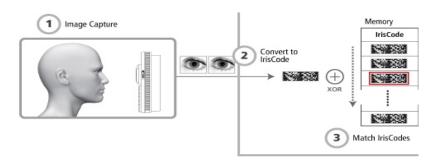


Figure 7. Iris Recognition (After: LGIris.com)<sup>5</sup>

In addition to the implementation of the Iris Recognition Biometric technologies, the UAE government issues to all expatriate residents and Emiratis alike "smart" identification cards issued by the Emirate Identity Authority (EIA). The UAE currently uses Radio Frequency identification cards (RF-ID). The RF-ID is used at ports of entry and exit and with employers. The EIA plans on integrating the RF-ID with banking services for use as an ATM as well as for drivers licensing and many other e-government purposes (UAE Interact, 2009 "ID"). The RF-ID allows for the recording of data to be streamlined and made user friendly. Overall, the application of policies coupled with the reactive capabilities and the implemented technology has allowed the UAE to successfully monitor the movement and activities of expatriate residents as well as minimize the presence of those residing within the country illegally.

<sup>&</sup>lt;sup>5</sup> Figure 7 depicts a diagram adapted from LG Iris. In the case of LG, ID cards are used complementing the system. The portion shown shows the basic scan that is entered into UAE's database in order to ensure a match to a previously recorded deportee does not occur.

#### 5. Bidoon

Some of those in the UAE that are non-national are neither illegal nor legal expatriates; they are bidoon. The term "bidoon" in Arabic means "without." This term is used to refer to those living in the UAE and other GCC countries that do not hold citizenship with the countries in which they reside nor any other country. This is yet another unique aspect that could potentially cause a threat being that they are relatively unaccounted for persons.

In 2008, an estimated 10,000 bidoon were living in the UAE according to a source from the Ministry of Interior (Rym, 2008). Other estimates vary, suggesting that there are somewhere between 20,000 to 100,000 persons without any citizenship or proof of citizenship living in the country. In October six of 2007 the country had granted citizenship to 1,294 bidoon and looks to systematically attempt to naturalize others "as quickly as feasible," states the official Brigadier Abdul Aziz al-Sharifi, Ministry of Interior (Abu Dhabi AFP, 2007). The government is also reported to have "granted nationality to 70 previously stateless persons" in 2009 and "51 persons in 2008" (U.S. Department of State, 2010). In order to qualify for naturalization, "a person and his family must have lived permanently in the UAE before the creation of the federation of seven emirates, possess no documents proving former nationality and have no record of crimes pertaining to honor or breach of trust" (Rym, 2008). For many it can be a frustrating process as they have nothing to hide and look forward to becoming citizens in the country they and their families have considered home (Abu Dhabi AFP, 2007); however, the government is taking time to ensure that infiltration does not occur through the naturalization process and must tread carefully, especially with current threats of terrorist organizations.

#### 6. Threat of Infiltration

Issues related to internal security are not two-dimensional; the threat that is posed is able to take many forms. One dimension of the threat that is posed by the disproportionate number of expatiates is that it provides an environment that lends itself to the government and general workforce being infiltrated by persons considered to be a

threat to the internal security. As of the summer of 2009, "the UAE deported 44 Lebanese men and their families for suspected ties to Hezbollah.... The men, who had been working in both the private and public sector, were funneling small amounts of cash to Hezbollah-affiliated groups back home..." in response to "a 'significant' worry: the possibility that Iranian-linked sleeper cells could sabotage critical sectors such as energy, banking and transportation" (Coker, 2009). In cases such as this, intelligence and "participation of members of our society" (ISNR, 2007) is necessary in order to further the best interest and security of the country and those residing within (ISNR, 2007). Monitoring of communications and other information and virtual technologies is necessary as well. Following this occurrence, the UAE began "tightening oversight of government workers and foreign residents because of concerns about the threat of infiltration by Iranian agents" (Coker, 2009). The UAE has looked to technology to assist in monitoring the activities of individuals through the banking system, which as discussed below, has implemented a number of policies and measures to ensure that monies are not leaving the UAE banking system and going to so-called illegal or terrorist organizations.

# D. ADDITIONAL NON-CITIZEN-BASED THREATS: TERRORIST AND ILLEGAL ORGANIZATIONS

The geographic location of one of the Emirate's major cities, Dubai, coupled with the relaxed approach to commerce and large number of expatriates has been exploited by various illegal organizations that have used the location as a strategic point in their behind-the-scenes criminal activities such as smuggling, gunrunning, human-trafficking, money-laundering and terror-funding operations (Davidson, 2008). These crimes do not remain limited to one Emirate, however. As a result of such operations there have been measures implemented by both local and federal government.

### 1. Threat Posed

Of a number of activities that have been carried out by illegal organizations within the UAE, most predominately are gun running, human trafficking and money laundering. Generally these activities are carried out by expatriate residents or visiting

persons within the UAE. Efforts have been made in order to curtail such activities. One of the major issues that the UAE has faced is human trafficking. In 2005 the "Annual Trafficking in Persons" report listed the UAE at "Tier 3" status along with countries such as Burma, North Korea, and Cambodia (Davidson, 2008, p. 284). "Tier 3" is a status which suggests that the country was permitting human trafficking by not having applied or enforced minimum standards in this area (Davidson, 2008, p. 284). Soon followed the passing of Law 51 in 2006 that made human trafficking an offence punishable by fines and up to life imprisonment.

The UAE's National Committee to Combat Human Trafficking released its own annual report...showing that the number of human trafficking cases taken to court in 2009 was more than double the previous year. The report said 43 cases went to court in 2009, involving 86 trafficking victims. (Zoi, 2010).

Recently the UAE has been upgraded to a "Tier 2" status indicating vulnerability. The change in rating was a definite acknowledgement of the efforts made by the government to combat this security-threatening illegal activity (Zoi, 2010).

Gunrunning and drug trafficking have been less common due to the harsh results that one must face within the UAE legal system. Money laundering, while it is claimed not to be common by the UAE Central Bank, has in the past been a major concern. "The UAE considers it extremely important to ensure that monies earned through illegal activities abroad are not run through the financial system" (Central Bank, 2000, p.1). In addition to laws within the government, the Central Bank has published regulations such as "Regulation Concerning Procedures for Anti-Money Laundering – Circular No. 24/2000" and "SCA Regulations No. 17-2010 concerning Anti-Money Laundering and Combating of Terrorist Financing" to join prevention efforts. The regulations ensure that identities are verified, as are sources of money. The banking sector has its traditional counterpart in the UAE culture, which has been even more vulnerable to illegal use and exploitation.

## 2. A Unique Atmosphere: Hawala

The traditional Hawala system, which is based on fairness and trust, is based in Muslim Sharia law. The "Hawala" is "an informal remittance system that does not require transfer or identity verification...The transfer of money is carried out through [an] unregulated network with no physical or electronic movement of money" (Benedetta, 2008). The exploitation has not been limited to the activity of mafia-like organizations; terrorist organizations have also taken advantage of the UAE, the banks, Hawala system, and their strategic position.

### Benedetta (2008) explains:

For transnational terrorist groups like al-Qa'ida, Hawala represents a significant asset in a highly diversified funding system. The five main funding sources for such groups are (1) donations from charities, (2) individual contributions—whether they are coerced or spontaneous, (3) state sponsorship, (4) profits from legitimate businesses, and (5) profits from criminal enterprises. The Hawala system has bolstered these fundraising efforts by providing a secure channel for transfers between legitimate companies and criminal enterprises.

Money laundering consists of three phases: placement, layering, and integration. Since Hawala is a remittance system, it can be used at any phase. (Patrick & Harjit, 2000). Even with the vulnerable Hawala system in place within the UAE culture and economics, money-laundering schemes are often carried out in regulated institutions.

Hawala 101: The hawala system is an effective way to transfer money quickly (and sometimes illegally). Here's simplified example of how the system works

A Pakistani to send Living and working in New York wants \$5,000 to his family in Karachi.

He stop by a bank to start the transaction, but finds out that he will have to open an account and will be charged to convert the dollars to rupees and to send the money. He thinks he might be able to do better.

Instead, he chooses a hawala dealer who offers him a lower fee and better exchange rate than the bank. He gives the dealer the \$5,000 plus the conversion and delivery fees.

The New York dealer contacts a dealer in Karachi and provides the details of the transaction. Since the hawala system relies on trust, the dealers are able to proceed with the transaction immediately.

If the Karachi dealer has the rupee equivalent of \$ 5,000 on hand, the New York dealer asks the sender for a password or, which the sender shares with his family.

The New York dealer gives the Karachi dealer the password, they receive the money and the transaction is complete.

The family does not have to pay a fee, and there is little or no paper trail. The dealers will settle their debt later.

Figure 8. Standard System of Hawala (From: Berti, 2008)

### 3. The Proactive Response

### a. The Banking Industry

The Middle East and North Africa Financial Action Task Force is an intergovernmental body formed in 1989 in attempt to regulate the Hawala system. The UAE also has a regulation system in place, based on the Abu Dhabi Declaration on Hawala, where the regulations are not overly restrictive so as to interfere with the methods, yet Hawala dealers must be registered. The regulation also requires that suspicious transfers be reported and that details of remitters and beneficiaries be recorded on a simple form and given to the Central Bank. Additionally, in 1999, in an effort to curb further illegal activities as mentioned above, the UAE federal government set up a "special 'anti-money-laundering and suspicious-cases unit" (UAE Central bank, 2000); in 2000, an anti-money-laundering committee was established; and in 2001, an anti-money-laundering law was passed in response to the probability that funds supporting the terrorists involved in the United States attack on 9/11 flowed through Emirati banks. "The U.S. September 11 Commission estimated that the bulk of the funds for the attack, some \$500,000, had been wired to the United States via the UAE Exchange Center"

(Davidson, 2008). After 2001, at least 19 regulations, addendums, or amendments have been made in order to ensure the security of the financial sector within the UAE.

Although no large-scale terrorist attacks have occurred, al-Qaeda has purported to be active in the UAE. In 2002, a letter was intercepted by the U.S. that had been signed by a "previously unknown al-Qaeda Terrorist Organization in the United Arab Emirates Government," warning the UAE officials to stop arresting al-Queda's "mujahedeen sympathizers," and concluded with, "You are well aware that we have infiltrated your security, censorship and monetary agencies along with other agencies that should not be mentioned" (Davidson, 2008) In July 2005, a group claimed that they were the new organization of al-Qaeda in the UAE and Oman, demanding the "dismantling of all U.S. military installations in the UAE within ten days or 'the ruling family would endure the fist of mujahedeen in their faces' "(Davidson, 2008). No other incidents of note have been reported at the present time.

### b. Cooperative Measures Within the Region and Beyond

We believe criminal activity is not country- and region-specific. Therefore our work is not limited to the UAE and we collaborate actively with other countries as well.

(ISNR, 2007).

His Royal Highness (H.H.) Saif Bin Zayed Al Nahyan, UAE Minister of Interior states that the proactive and collaborative theory is a pillar of the UAE's approach to security (ISNR, 2007). Historically, since the inception, the UAE has been willing and open to the idea that external cooperation is a vital measure to ensure internal security. One of the first examples of this approach may be seen when the GCC was formed in 1981,

...to confront their security challenges collectively. [The] GCC was established in an agreement concluded on 25 May 1981 in Riyadh, Saudi Arabia between: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and UAE...The GCC is a regional common market with a defense planning council as well. The geographic proximity of these countries and their general adoption of free trade economic policies are factors that encouraged them to establish the GCC (Global Security, 2010).

The member states of the GCC are in cooperation in all areas of political interest as it has been "repeatedly emphasized that their goal is complete cooperation and coordination in all fields" (Kechichian, 1985, p. 864); however, it is not apparent that there has been complete coordination politically as the focus and attention has been devoted mostly to economic related issues (Kechichian, 1985, p. 864). More recently,

Security ties among GCC states have loosened, with members looking to the United States rather than to each other to meet their security needs. Even though the United States withdrew most of its forces from Saudi Arabia in 2003, it has dramatically expanded its military links with Kuwait, Bahrain, Qatar, and the UAE.... [Collaboration with the U.S. and other European countries] has come at the expense of regional integration (Charles & Shepardson, 2007).

The cooperative and collaborative alliances that the government of the UAE has made have not only been with fellow GCC states and the U.S., the UAE also enjoys strong relations with the governments of France and the United Kingdom. According to Patrice Paoli, French Ambassador to the UAE since 2005, a "privileged relationship between France and the UAE" has been in existence for decades; "the two governments coordinate on levels such as academics, culture, military force, and economy" (Landais, 2008). "Britain [also] has got a fantastic set of relationships, historical connections, great coordination between governments, armed forces, a huge amount of exchange of people." (Sapsted, 2010). Now "a joint UK-UAE diplomatic taskforce has been established in the first move by the new British government to forge stronger ties with the world's emerging economic superpowers;" according to UK Prime Minister David Cameron, the taskforce with the UAE is part of the UK's "efforts to elevate links with the Gulf" (Sapsted, 2010).

The UAE's establishment of International Security and National Resilience, Abu Dhabi (ISNR) is as much an economic enterprise as it is an effort to remain current in the area of security technologies. ISNR is under the patronage of H.H. General Sheikh Mohammed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces. The mission of the ISNR is to:

address the current and future dangers caused by the growing concern of terrorist access to a wide range of materials and technological expertise in the manufacture of NBCWs (Nuclear, Biological and Chemical Weapons) and the increasing threats of natural and manmade disasters worldwide (INSR, 2007).

The exhibition welcomes "all those who operate commercial and investment hubs, entities responsible for border security, protecting transportation infrastructure and vital installations as well as those responsible for disaster resilience whether in the UAE or internationally to take part." (ISNR, 2007). The goal here is to learn, share and improve within the realm of internal security; the exhibition will be in a cooperative setting and "will see the participation of international, regional and local companies and provide an ideal platform for these companies to showcase their latest technologies, equipment and services to counter man-made and natural threats" (ISNR, 2007).

### E. EMIRATISATION

In addition to the proactive and reactive measures as discussed above that the UAE government is taking in order to ensure that the threat of the disproportionate number of expatriate residents is controlled the government is "making efforts to address human resource development challenges and any existing mismatch between the skills and technical knowledge of their secondary and post-secondary education graduates and the needs of the labor market" (Constant, 2008, p. iii). This effort by the UAE government is often referred to as either "Emiratisation" or "Nationalization." The approach is a "strategy [that] aims to use the country's human resources optimally in the economic process and to transfer skills and knowledge [as well as jobs] from expatriates to UAE nationals" (Hormann, 2006, p. 56).

Emirati according to the worldnik dictionary (2010) is "a person descended ethnically from the Arab people of the United Arab Emirates," but the meaning is not confined to this simple definition; the identity of the people of the UAE is rooted in Islamic civilization. The components that describe an Emirati are truth, sincerity, and ethics. The Emirati's identity rests on feelings of love for the UAE, its way of life, and its establishments. They are proud of their country and feel responsible towards its well-being and prosperity, (Salem, 2008). It should be confused with citizens because the UAE granted citizenship to other residents at the time of formation. The Emirati identity is

very important and as such, Emirati often feel the UAE is endangered by other identities as there is diversity of nationality in the country. The locals fiercely protect their Emirati identity (Salem 2008).

Emiratisation means integrating Emiratis into the workforce. The efforts of the government successfully Emiritising the workforce rely upon those persons who are of age to work being properly educated to enter into the workforce as well as desiring to enter the workforce. In the UAE the population of nationals is small compared to the expatriate residents (see Figure 2). Based on estimates from 2006, "there are only an estimated 33,000 unemployed UAE nationals and an average of 300,000 jobs created by the UAE private sector every year" leaving mostly expatriates to fill the vacancies (EIU, 2007). The percentages are even lower when considering Emiratis of a working age compared to the expatriates. According to the 2005 census, 38 percent of nationals were between the ages of 0-14, 59 percent between the ages of 15-69, and 2.6 percent being 65 or older (Ministry of Economy, 2006). At least 38 percent of the UAE national population was not of working age in 2005. As of 2005, the unemployment rate of nationals that were of employment age was 12.6 percent; 19.8 percent for females and 8.9 percent for males (Al-Ali, 2008). Considering the combined statistics, at least 50 percent of UAE nationals were not employed or employable.

The need for the UAE to gain greater involvement from the UAE nationals within the private sector is depicted in the above statistics. The government faced two issues here: 1) How to prepare the large number of UAE nationals that are yet of age to be employed or employable, and 2) Why are the UAE nationals that are of employable age unemployed? The following is a discussion of the approach that was taken by the government as well as an overview of the results.

Although statistically it is impossible to replace the expatriate workforce completely, the UAE government understands "the importance of education to development of its own citizenry's human capital" (Constant, 2008, p. 107). With a large portion of the national population being school-aged there has been a strong focus on preparing these individuals to take on active roles within the private and public

employment sectors. The effort of the UAE government has been seen in all of the investment that has gone into enhancing the UAE educational system and opportunities.

The UAE government has established a number of organizations "to link governmental, private, special needs, and vocational training and educational systems" (Constant, 2008, p. 123). The main organizations are the Ministry of Education, the Abu Dhabi Education Council, and the Dubai Education Council. Other efforts have been made by Dubai and Abu Dhabi through the creation of Knowledge Village in Dubai and Education and Research City in Abu Dhabi that provide an area for students and already employed nationals to have access to training, universities, and other technology-based resources for furthering their education and employability.

The UAE has successfully established grade school systems within each of the Emirates in addition to providing university opportunities through the UAE University, Zayed University (ZU), and Higher Colleges of Technology (HCT) as well as the American Universities of Sharjah and Dubai, Sharjah University, Ajman University of Science and Technology, Abu Dhabi University, AlHosn University, the Sorbonne, New York University, and John Hopkins' Bloomberg School of Public Health. Internships are another beneficial way for graduates to gain experience and to segue into employment. Many interns are hired after graduation. When graduates are not hired it is due to "lack of vacancies; trainee inability to perform the job; lack of loyalty to the company; and unrealistic expectations related to working hours, job title, and compensation" (Ahmed, 2003 as quoted in Constant, 2008, p. 126).

Although education standards have been raised and opportunities abound for UAE nationals in regards to obtaining the necessary education to enter into the private and public job markets, there are still many barriers. One such barrier is cultural. Women face a number of challenges when looking to be employed within the public sector. Traditions such as maintaining a segregated workspace are one of the many reasons that women cite when asked why they do not desire to enter into a public sector position. Many prefer staying home to compromising their cultural and religious values to work in a private sector position.

In addition, for Emiratis, "work in the private sector has traditionally not been as attractive as work in the government sector, partly because the government sector offers better benefits, prestige and status, flexible working conditions and shorter hours, and greater job security" (Constant, 2008, p. 116). Because of these issues the government has also focused their attention to evening out the workforce distribution between public and private sectors. The UAE government actively listens to the reasons for not desiring positions within the private sector and has taken efforts such as giving nationals the opportunity to "participate in a national pension plan while working in the private sector. Government employee retirement benefits, disability benefits, life insurance, and end-of-service bonuses would be transferred to the new national program" (Constant, 2008, p. 133).

Other efforts are referred to as policies that relate to Emiratisation. Specifically, Emiratisation is the term that is used to describe the policies and laws that the UAE government is enacting in order to generally increase the number of UAE nationals that are employed within the private sector. One of the main policies that was put in place in order to obtain results in Emiratisation was to "impose specific targets for the share of nationals to be employed within a given sector," an example of which was the "Council of Ministers' resolution...that all banks must increase their share of local staff by 4 percent annually" (Constant, 2008, p. 133). Such policies were put into effect in other job sectors; however, the banking system was statistically the sector that was closest to successfully maintaining positive growth in the number of nationals employed each year.

As of 2008, it appears to be statistically proven that the measures were effective. The Ministry of Economy Report (2008), a complete overview of the employment sector, showed the following statistics:

Ages 0 -15 make up 24.3% of the total population;

15-19: 7.1% employed, 3.1% unemployed, 83% fulltime student;

20-24: 67.8 % employed, 6.9% unemployed, 19.3% fulltime student;

25-34: 95.3% employed, 3.1% unemployed;

35-44: 97.3% employed, 1.5% unemployed;

45-54: 94.3% employed, 1.4% unemployed;

55-64: 88.6% employed, 1.1% unemployed.

In total, 86.3 percent of the UAE nationals are employed, leaving only 13.8 percent unemployed. This suggests that the result of the efforts made were successful from the government to the organization level and motivated the nationals of the UAE to work. There is a supposed 20 percent decrease in the number of unemployed persons (Ministry of Economy, 2008). What is left now is to look to the future to determine whether the educational policies have been effective and to focus on balancing the Emirati workforce between the private and public sectors.

### F. CONCLUSION

The United Arab Emirates faces a number of internal security issues. As discussed, the major security issue that dominates a discussion of the UAE internal security is the large resident expatriate workforce that is invaluable to the country's economy but also represents the real threat of infiltration in addition to terrorist and illegal organizations. It is generally considered that "The UAE's success in diversifying its economic base while enhancing the national population's skills to help sustain its diversification efforts will depend on striking the appropriate balance between the strategies pursued to reach these two goals" (Constant, 2008, p. 121). As has been set forth within this study, the UAE is taking a number of proactive measures in various areas to ensure that the expatriate resident population remains stable and free of those wanting to commit illegal or terrorist acts, using IrisGuard and RF-ID for example, and to ensure that its national population becomes and remains active within the economy, such as those policies regarding Emiratisation. The imposition of fair, but thorough and progressive laws has allowed the UAE to maintain a secure multicultural environment.

When posed the question in a 2007 interview as to what the UAE will be able to do in order to ensure that they are able "to maintain a safe and secure environment," His Royal Highness (H.H.) Shaif Bin Zayed Al Nahyan, UAE Minister of Interior responded that

[the country's] approach to security is based on a proactive rather a reactive approach. This has helped us to immediately spot any criminal activity in the very early stages and uproot such activity before it develops. We believe criminal activity is not country and region-specific. Therefore our work is not limited to the UAE and we collaborate actively with other countries as well. We also value the participation of members of our society in our work and this is a philosophy that helps us move rapidly and achieve quick results. (ISNR, 2007)

Creating relationships with the countries of Nepal, India, Pakistan, Indonesia, and Bangladesh as a means to provide the country with legal expatriate workers has also limited the number of illegal workers within the country.

After reviewing the measures that the UAE is taking to ensure that the country's security remains stable, the design of the governmental approach is evident and technologically progressive. It is within the proactive measures, such as those taken within the educational system, that will have to prove themselves over time, and will likely be as successful as the measures taken thus far to control the flow of expatriate immigration.

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# IV. TECHNOLOGY'S EFFECTS ON CULTURE AND SECURITY IN THE UAE

### A. INTRODUCTION

The UAE's economy in relation to its multicultural population was highlighted in the previous section of this research. It shows how the population of expatriates has been a driver to the UAE's economy and how the government implements its policies to address issues related to internal security. This chapter will highlight the role of modern technology as the medium that was influential to UAE's growing global importance, its economic performance, its culture, and its people. Modern technology has influenced the UAE and has helped the government implement its action plans and reinforce its policies to ensure internal security of the nation. Technology has in fact been utilized to facilitate security in the financial industry as well as prevent illegal activities that may occur during migration and immigration of people to the UAE. Through technology, the UAE is able to strengthen its business in the global arena by making its processes on par with world standards. The government utilizes technology; however, it needs to balance the influence of technology with the culture and the people to ensure national security.

The United Arab Emirates has succeeded in moving its economy quickly into the digital age by applying technological advances, especially within the last decade. The following chapter discusses these emerging technologies in the UAE, focusing upon communication, the internet, mobile and wireless technologies, and social networking. The advantages and uses of these technologies are examined, before explaining the limitations, disadvantages, and tradeoffs associated with monitoring and shutting down various technologies. Technology's effects on culture and security in the UAE are addressed in an attempt to answer the following: 1) How can the UAE maintain internal security with emerging technologies? and 2) What are the tradeoffs associated with monitoring and shutting down various technologies in the name of security? The chapter concludes with the UAE policy perspectives and approaches that could be applied to understand the cultural effects of technology and maintaining internal security with emerging technologies.

#### B. TECHNOLOGY AND ITS IMPLICATIONS

Technology and culture are two dynamic, mutually dependent, and continuously evolving dimensions of modern societies that impact the lives of many human beings on earth. Technology is generally considered a branch of knowledge dealing with engineering. The word technology is derived from the Greek word "tekhnologia," which Oxford Dictionaries (2010) defines as "systematic application of scientific knowledge for practical purposes, especially in industry." Information Technology (IT), is:

The set of tools, processes and methodologies (such as programming, data communications, data conversion, storage and retrieval, system analysis and design, [and] systems control) and associated equipment employed to collect, process and present information. (Business Dictionary, 2010, "IT")

IT is one of the fastest growing areas in the field of technology and a concept widely applied in this chapter due to its impact on culture.

Culture is discussed in context with the effect that technology may have upon it. Edgar and Sedgwick (2008, p. xi) addressed the "deeper and slowly moving cultural changes that have become unavailable with the dawn of the new century" including the increasing impact of new technologies such as biotechnology upon societies. The word culture has a wide meaning spectrum that defies the efforts of a definition. Kluckhohn (1962, p. 3-30) managed to define culture in the following eleven ways:

- 1) the total way of life of a people
- 2) the social legacy the individual acquires from his group
- 3) a way of thinking, feeling, and believing
- 4) an abstraction from behavior
- 5) a theory on the part of the anthropologist about the way in which a group of people in fact behave
- 6) a storehouse of pooled learning
- 7) a set of standardized orientations to re-current problems

- 8) learned behavior
- 9) a mechanism for the normative regulation of behavior
- 10) a set of techniques for adjusting both to the external environment and to other men

### 11) a precipitate of history

"[H]ow culture can both inhibit and encourage technological innovation and how Arab cultures can move their economies more quickly into the digital age" is an important aspect of our the inquiry here (Loch, 2003, para. 1). To understand the effect of different technologies on people and their culture a review of the meta analysis (Yousafzai et al., 2007, pp. 251–280) along with the examination of the arguments of Hatzakis (2008) are made on the impact of technology to provide insight into both human and technological aspects of culture.

# C. OVERVIEW OF EMERGING TECHNOLOGIES IN THE UAE

"Technology has advanced further and faster [in the last 100 years] than in the whole of previous human history" (Tapper & McLachlan, 2003, p.1). Emerging technologies especially in the fields of communication and internet technologies, to include cell phones, video chat facilities, and social networking are gaining a significant role in the UAE society and culture. All such emerging technologies rely on one or the other forms of networks that "carry the flows of information between distributed applications such as telephony, teleconferencing, media-sharing, World Wide Web access, e-commerce, and so on" (Kumar et al., 2008, p. 1).

A dilemma occurs when a government must balance its need to allow its citizens the freedom to communicate and the need to ensure that the governmental interest is served. In the case of the UAE, the governmental interest takes a number of forms. As addressed below, we will focus on the concerns arising from the effect technology may have on the culture as well as the internal security of the UAE.

# 1. Communication Technologies

Communication Technologies broadly refer to the convergence of telephone networks with computer networks through a single cabling or link system, resulting in a huge cost savings by replacing or eliminating the traditional telephone network. Though this merger of the telephone network with the computer network system has its substantial economic advantage, it comes with a plethora of concerns such as national security threats, cyber crimes, technology shifts etc. UAE has been witnessing a more sudden growth and expansion of communication technologies, compared to the rest of the Gulf countries and other developed economies.

According to the Telecommunication and Regulation Authority (TRA) report published in 2010, the UAE is ranked the highest of all the GCC and Arab states in the ICT Development Index based on five indicators: fixed line penetration, mobile penetration, international internet bandwidth per internet user, the proportion of households with computers, and the proportion of households with internet access (TRA, 2010, "ICT Survey"). In addition they reported that out of 154 countries that were divided into one of four groups used to describe the level of ICT within the economy, higher, upper, medium and low, the UAE was one of the 33 countries placed in the highest category, and was the only GCC/Arab state to be included in this group. In another study, the United Nations e-Government Survey 2008, the UAE is the topranking Arab state in terms of e-readiness, in addition to being the top Arab state and the 12th in the world in the web-measure index that assesses the extent to which governments are providing e-government policies, applications, and tools. It is the fifth highest-ranking country in the world in terms of transactional services.

# a. Mobile Communications, Instant Messaging and Video Conferencing in UAE

A mobile device is a computing device that is not restricted to a desktop and can connect to a data source without a physical connection (Sharma & Gupta, 2004). The term mobile phones generally covers all forms of mobile devices including mobile phone, PDA phones (Personal Digital Assistant), smart phones, cellular phones, or any

other telecommunication devices that can be carried (TDI, 2002, "Wireless and Mobile Computing"). According to ICT Statistics (2010) "Mobile cellular penetration around the word by the end of 2009 was 67% compared to 26% for internet penetration" (ICT, 2010).

TRA (2010) compared the UAE's position relative to other Arab states and a range of countries in Europe, North America, and Asia across 10 commonly available technology indicators. According to TRA (2010), the UAE ranks the first among the benchmarked Arab states in all 10 of these indicators, and first across all of the benchmarked countries in mobile subscribers per 100 inhabitants, the proportion of households with mobile telephony, and is one of several countries with ubiquitous mobile coverage.

In the case of the UAE, the ICT survey conducted by Telecommunication Regulatory Authority (TRA) is revealing in some very important statistics such as: "96% percent of the respondents surveyed had access to a mobile phone; and 99% of the households in the UAE have at least one mobile phone in the household. The average UAE household has 4.3 mobiles." According to TRA (2010), "mobile penetration reached 200% by October 2009, the highest rate worldwide, This penetration is measured by dividing active mobile subscriptions by the UAE total population".

# b. Internet Communications, Wireless, and Broadband Technologies

According to Edgar and Sedgwick (2008, p. xi), "the expansion of the internet and the integration of our lives with the diverse virtual worlds that constitute 'cyberculture' promise enormous changes to our self-identity and to our interaction with other people." Penetration of internet communications in the UAE is very high when compared against many regions of the world, and it is very similar to that of Europe, as revealed in the TRA (2010) survey. Seventy-four percent of the households in the UAE have at least one computer—a desktop, portable, or handheld computer. It is also interesting to observe the survey result that 74% of survey respondents aged between 15 and 74 have used a computer at their home in the last 12 months.

Wireless broadband technologies help in offering abundant internet and broadband access. The emerging wireless broadband access technologies in the UAE include WLANs (Wireless Local Area Networks), WiMAX family, and IEEE 802.16e to satellite communications. Wireless USB (Universal Serial Bus) technologies such as 3G and 4G systems have also been included in wireless broadband technologies (Smith et al., 2006; Glisic, 2005). Such a rich ensemble of emerging wireless and broadband technologies in the UAE has helped the UAE to be "ranked the first of all the Arab states in the 2007–2008 Network Readiness Index (NRI) study conducted by the World Economic Forum and INSEAD, and 29th among all 127 countries assessed. The NRI measures the capacity of an economy to fully leverage ICT for increased competitiveness and development" The NRI study was published in The Global Information Technology Report of 2007-2008 and is based on data collected by organizations such as the ITU, the World Bank, and the United Nations" (TRA, 2010, p. 67).

After analyzing the individual values, the UAE ranked first among the Arab states on: internet user rates, international internet bandwidth capacity, the importance of ICT to the government vision of the future, personal computer usage, ICT usage and government efficiency, egovernment readiness index, government prioritization of ICT, laws relating to ICT, and the number of telephone lines (TRA, 2010, p. 67).

Internationally, the UAE was found to have "the lowest residential monthly fixed telephone subscription charges and the lowest cost of mobile telephone calls along with Egypt, Italy, and Hong Kong" (TRA, 2010, p. 67). Furthermore, the survey cites that 66% of households in the UAE have Internet access at home; 72% of individuals residing in UAE have accessed the Internet in the last 12 months, and of individuals who use the Internet, 78% use it on a daily basis. The United Kingdom (UK) conducted a household survey in 2008 comparable to the one undertaken in the UAE. Assessment of the results reveals that many similarities exist in terms of levels of access and use of the Internet within the two countries.

	UAE	UK
Households with Internet	66%	65%
Households with Broadband	57%	56%
Frequency of Internet Use Everyday	78%	69%
Frequency of Internet Use Once a Week (but not every day)	18%	22%

Table 1. Comparison of Internet Indicators, UAE and UK (From: TRA, 2010)

# c. Social Networking

UAE society has a rich, colorful and diverse social life. Hurreiz (2002, p. x) has examined the factors and contacts that have left considerable impact on UAE culture, including technology parameters. Social networking is an emerging technology that is not so widely used in the UAE; but has a potential to impact the society considerably. The TRA (2010) survey offers some indications to the possibilities of social networking in the UAE. As part of the survey, individuals were asked to select from a list of internet activities: use of the internet as a source of information, communicating, online shopping and services, internet banking, education or learning activities, dealing with government organizations, and leisure activities. It showed that 87% of the respondents preferred using the internet for email. Other popular areas of internet usage include information search (78%) and entertainment (67%). It is interesting to observe that there was no clear indication to the extent of social networking penetration; this is mainly attributed to cultural elements existing in UAE society.

### D. EMERGING TECHNOLOGIES: BENEFITS, USES, AND ADVANTAGES

What are the major advantages and applications of modern and emerging technologies in the UAE, and most importantly, what is beneficial about those

technologies? The modern technologies help in bringing people together. They connect people and that helps in unlimited connectivity and information sharing. Such seamless connectivity is helpful to both individuals and nation states alike.

The world today moves towards mutual interdependence among nations, propelled by the information and communications revolution, the growing movement of capital and the shrinking margins for political maneuvering under the unipolar international system (ECSSR, 2005, p.4).

### 1. Economic Benefits

Emerging technologies, especially in the field of communication and internet, are good for business and trade and have tremendous potential for considerable economic advantage. The major economic impacts of technology to business and trade can be classified into the following five key areas: 1) productivity, 2) employment, 3) more efficient markets, 4) higher quality goods and services, and 5) new products and services through innovation.

As observed by Atkinson & McKay (2007, p. 1),

In the new global economy, information and communications technology (IT) is the major driver, not just of improved quality of life, but also of economic growth. Moreover, there are strong indications that IT has the potential to continue driving growth for the foreseeable future.

The UAE has taken its advantageous position as a wealthy country and invested in emerging and cutting-edge technologies in order to better serve the country's interests, such as government access, the iris recognition scans, as well as the smart identification cards.

The emerging modern technologies are very convenient and user-friendly; and thus can make everyday life easier. In the business and management context, such technologies have enabled "the creation of a host of tools to create, manipulate, organize, transmit, store and act on information in digital form in new ways and through new organizational forms" (Atkinson and McKay, 2007, p. 3). These tools that make life simpler and easier are reflected in all aspects of the economy, including "internal operations of business, government, and non-profit organizations; transactions between

organizations; and transactions between individuals, acting both as consumers and citizens, and organizations" (Atkinson and McKay, 2007, p. 3).

# 2. Impact of Technology on UAE Culture and Security

Technology, because of the rapid pace of change associated with emergence and updating, creates a new dimension for cultures. Culture and technology have a reciprocal relationship where both are mutually influenced, shaped, and defined continuously by one another. As advocated by Ess (2001, p. 29), the impact of technology in any society is "needed to move towards a genuinely intercultural global village," especially by using communication technologies in ways that "globalize communication while sustaining the integrity of diverse cultural worldviews and communicative practices". There are many advantages observed for UAE culture and security due to the increasing adaptation and use of modern and emerging technological innovations.

The use of technology is immensely helpful in modernizing and boosting the governance system in UAE, as evidenced from the innumerable Information Technology and e-Government initiatives conceived and launched by the UAE government. Economic integration of different emirates through common protocols has become a reality mainly due to the advancements in technology. Security and defense cooperation; not only between the emirates in UAE, but also with other GCC (Gulf Coordination Council) countries; as well as other nation states through emerging technology is making the UAE defense and security management robust. A practical example of the application of emerging technologies is the introduction of electronic visa processing, which helps visitors using any of the UAE airports, making international travel less arduous by decreasing processing time by accessing comprehensive resident databases through an electronic surveillance system.

Technology also offers a platform for interaction and contributions in a forum free from any form of gender bias. Tools for instant communications, social networking, internet blogging, etc., are promoting the cause of women's empowerment by capitalizing on women's intellectual assets, and utilizing them in technological and information fields. As Sharma (2003, p. 1) observed, "the holistic new ICT technologies are powerful

tools for women to for women to overcome discrimination, achieve full equality, well-being and participation in the decisions that determine their lives and the future of their communities". In a culture like the one prevailing in the UAE, emerging technologies permit women to communicate and interact with the world without leaving home, allowing for some cultural sensitivity to still exist. Such interaction again is another source of cultural shock as such technological advances can prompt women, especially young women, to interact with men in a way that is not culturally appropriate; forcing diffusion of emerging technologies difficult.

# E. DISADVANTAGES OF EMERGING TECHNOLOGIES: PROBLEMS AND CHALLENGES

Any technological advancement always comes with its share of problems and challenges. The same holds true in the case of the emerging technologies in the UAE. What is bad or problematic about these technologies? With the unique cultural melting-pot context of UAE, importing ready- made technologies without localizing them has further aggravated the inherent disadvantages of the emerging modern technologies, demanding a need to initiate a collective and comprehensive approach to address such technological challenges, along with an increased level of expenditure allocated to scientific research specific to the UAE environment. Security concerns are one of the most pre-dominant issues associated with the growth and development of communication technologies in modern times. "Clashes between the maker of Blackberry smart phones and India, Saudi Arabia and the United Arab Emirates are the latest rounds in a cat-and-mouse game pitting authorities against technologies racing beyond their grasp" (Reuters, 2010, "Espionage").

Efforts made to control and regulate technology are inherent acts in relation to security because of the concerns raised in the commercial spectrum. In the modern market economy, mutual dependence and influence of transnational corporations cannot be ignored due to the compulsions of foreign trade. A delicate balance needs to be attained, which is appropriate for the context that allows for the benefits of technology within the desire of nation states to control and regulate emerging technologies in the name of security.

#### 1. Cultural Backlash

Lin and Kinzer (2003, para. 1) argued that technology could be a valuable aid for making cultural values explicit if properly designed and implemented. This argument is found to be valid in the UAE, as in spite of heavy internet penetration, cultural stereotypes and artifacts are preventing the diffusion of many benefits of such technological advancements for the betterment of the society. While the innovative developments in technology could have been directed to "encourage ruling regiments to respond positively to the aspirations of the region's people" (ECSSR, 2005, p. 3), the cultural elements that inhibit and make people reject social media sites and technology are depriving such improvements as technological disadvantages. According to Healy (2010),

Technology can bring about two types of results: anticipated and unanticipated – both [of] which are highly dependent on the goals of a particular culture, which can be desirable or undesirable. For instance, the needs or desires across cultures are hardly ever the same – Africa (or other third world civilizations for that matter) needs wealth, whereas America needs a better manner in which to distribute its wealth. (p. 8)

### 2. National and Regional Security Concerns

Most of the nation states think their sovereignty is being threatened by new technology; making governments around the world ready to deploy technology that invades privacy. Encryption capabilities of modern telecommunication tools rooted in the new internet and communications technologies are perceived as a threat to national security and sovereignty due to the misuse of encrypted messages by terrorist groups. Intelligence operations of the nation states can be impeded by encryption technologies, which are impacting the ability to identify terrorist operations within their nations' borders. The new technologies allow communication services that scramble data with tough-to-crack codes. There are many encryption tools available that people can use for Internet telephone calls or email, "including 'Mujahedeen Secrets' software reportedly crafted by an Al-Qaeda support group" (Reuters, 2010, "Espionage").

The UAE is not an exception, as the latest developments involving the announcement of regulating certain forms of internet-based communications are a clear sign of such intolerance towards privacy-enhancing technologies that threaten national security. Examples include the impact of services like Google's talk messaging system and the telephone and video services provided by Skype. The UAE has announced its intention to ban BlackBerry messenger, email, and web browsing services starting October 11, 2010, for security reasons (Reuters, 2010, "Espionage").

### 3. Terrorism

Though UAE is blessed with a relatively secure and peaceful internal security situation, its proximity to a region marred with uprooting ideologies of extremism and violence is a risk in itself that warrants focused efforts of fighting such terrorist inroads. Technology is in the forefront for identifying and managing such terrorist risks to the country. The Gulf region has experienced various security and political developments during its recent history and the U.S. intervention and direct military presence in this region have added further complications to what was already a highly volatile region. (ECSSR, 2005, p. 157).

Deploying the innovative and emerging technological developments especially in the field of biometrics and Information Technology will help securing the internal security of the UAE. With the advent of new generation technological solutions, terrorist groups around the world could securely communicate with each other; Such covert communications on the internet have proven to be difficult codes to intercept for most intelligence organizations worldwide, making the risk very high for countries especially in the Arabian Peninsula. The UAE as a country included in such a territory, where dealing with regional conflicts is a constant security concern for its government, particularly in the backdrop of the Iran nuclear program and the collapse of Arab-Israeli peace process, this is a matter of grave national security interest. However, the UAE has successfully deployed the emerging technology platforms like bio-metrics and Information Technology, for example, for capturing, storing, and manipulating the data

of everyone who enters the country by linking their demographic data with their physiological identification data like retinal picture or fingerprints.

# 4. Protecting Foreigners

Online forums and social networking sites are a very popular and expanding area of communication and community building. While such forums offer a wide range of beneficial services to humanity at large in terms of seamless connectivity, people with malicious intent on distorting digital communications could also hack into online forums and social networking sites that have encryption capabilities resulting in security risks.

Technological advances make it easier to communicate with a global audience very easily. This results in interpreting culturally sensitive information differently in different parts of the world, threatening the life of foreign nationals belonging to the country from where the message originates, and living in other sensitive parts of the world. UAE has witnessed one such issue; certain artists from a European country posted some sensitive pictures and cartoons on the internet, resulting in protests in the UAE, ultimately forcing the government to intervene by banning the commercial products from that country.

### 5. Keeping Banks Secure

Modern technological advancements have led to a series of online banking frauds involving huge amounts of money. The e-commerce and online banking transaction practices have inherent risks of hacking since most of these activities are done using software and online technological platforms. The spread of Automated Teller Machines (ATMs) is another area of banking security.

In the UAE, as a country with a wide network of modern banks, investment exchange, and huge online transactions, the potential risk of fraud and theft are very high. Secure means protection is mandatory, without compromising on the very purpose of implementing these technologies:

Countries that shut out tools for protected communications run the risk of being branded unfriendly to legitimate business people who rely on protected communications in a competitive world. Governments can go to the extreme of simply banning such technologies, but the economic ramifications of this would be intolerable for all but the most draconian regimes, like North Korea. (Reuters, 2010, "espionage")

### F. POLICY PERSPECTIVES IN THE UAE

The UAE has to balance both security and cultural effects of technology. Both culture and security are important considerations to a society, but when it comes to the survival of a nation, the security dimension dominates over everything else. This factor has to be addressed, while monitoring and regulating technological development in the UAE. The perspectives on social capital and technological acculturation are helpful in designing suitable policy interventions to address the security and cultural dimensions while implementing technological advancements. It is imperative to formulate and implement policies aiming at enabling diffusion of the positive aspects of emerging technologies for the benefit of the society, yet at the same time keeping the cultural norms and traits intact.

### 1. Social Capital Perspective

Social capital perspective can be a useful approach in determining how the areas of focus from a technology-driven culture change and provide indications about potential ways to improve technology adoption. Social capital perspective is a concept that focuses the importance of networks of strong, personal relationships developed across groups over time, that provide the basis for trust, cooperation, and collective action in communities. It has been linked with the development of capabilities that enable organizations to take advantage of changes in their environment and to harness their innovativeness (Nahapiet and Ghoshal, 1998, pp. 242–266). A social capital perspective of the effects of technology is helpful in providing insights into both human and technological aspects of culture and its change interventions (Hatzakis, 2008, para. 1). It stresses the importance of considering the existing cultural prototypes while diffusing new and emerging technologies into a society. The less the technology challenges the prevailing cultural attributes, the more chances of building positive social capital could be introduced, especially in a high-context society like the UAE.

## 2. Technological Acculturation Perspective

Technological acculturation examines culture-specific inducements and impediments to using the technology in a country. This perspective is very useful in understanding the use and impact of the internet in an Arab country like the UAE. The argument that technology is making modern societies break down is evident from the fact that that people are in contact through chat and online messaging though they are in same city, which is particularly found to be true in the case of a cosmopolitan city like Dubai in the UAE. A technological Acculturation perspective can also help to bring out the counter argument into perspective that people tend to think it's faster and effective using technology, but they also forget the fact that meeting personally can never fully replace any form of technological platforms like online chatting.

### G. MONITOR VS. SHUTDOWN

The second consideration to be addressed while regulating the policy on security and the cultural impact of technology is to differentiate the technologies that need monitoring and the ones to be shut down. Historical and economical perspectives on technology and the culture tradeoff can provide the necessary insights for policy regulation on the monitor versus shut down debate. Adopting a historical perspective while framing, implementing, and reviewing policies, can help in proper technology implementation without compromising cultural values. The diverse challenges arising from international, regional, and internal developments, along with changes made in the past will provide the necessary data required for adopting a historical perspective in the UAE.

The UAE experience in adopting free market policies has resulted in diversifying its economic base and reducing dependence on oil as the major source of income. Technological advancements and globalization will lead to changes not only in the social structure but also in the social and cultural values of the local peoples. A Policies promoting knowledge-based economies, by keeping the economic perspective of technological advancements is a necessity in such situations.

The last dimension on policy perspective is to understand the tradeoffs between the available options and clearly defining accountability. To understand technology acceptance behavior more completely, Yousafzai et al. (2007, pp. 251–280) proposed a moderator analysis called Meta Analysis to examine the effect of different technology on people and their culture. This technology acceptance perspective can be considered a suitable policy intervention for UAE culture and economy. The Meta Analysis perspective for technology acceptance is the answer, as it suggests giving priority to accepting merging technology to derive higher dividend eventually, while at the same time encouraging an acceptance perspective to safe guard the cultural and security dimensions.

#### H. CONCLUSION

The world is witnessing one of the greatest ever periods of rapid technological revolution. With those emerging technologies, its advantages and disadvantages are placing multitudes of effects on the culture and other living conditions of people. Tapper & McLachlan (2003, p.1) have argued that "...we enter a new millennium in which technological advances bring the possibility of global ecological disasters." Such arguments are primarily focusing on the cultural and security impacts of technological advances. The technological advancements are instrumental in bringing many culture effects and vice versa in such periods of rapid change. The UAE policy perspectives and approaches can be adopted to diffuse the technological advancements while keeping crucial cultural traits and thereby enjoy mutually beneficial results for the UAE economy in particular and the region in general.

A variety of technological advances and globalization processes have been one reason for an attempted cultural homogenization in the world. The cultural impact of such technologies differs from place to place. "A thing found trans-culturally does not mean that it serves the same purpose or has the same cultural meaning in any two places" (Tapper & McLachlan, 2003, p. 1).

The efforts towards addressing the cultural effects of technology in the UAE also has the potential to address much larger issues affecting the region like driving the Gulf

common market, custom union, unified currency and free trade. Application of the UAE cultural impacts of technology perspectives to local and regional security and other issues can be seen as an extension of the movement of cultural change studies to bear on security "promotion and prevention strategies" (Berry et al., 2007, p. 423) now underway nationally and internationally. It is time to accept the view that culture is indeed one of the most important contributors of human behavior and any security and technological variable does influence culture which in turn trigger the change in behavior of people who constitute the culture, and overall shapes the dynamics of the cultural effects of technology.

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## V. CONCLUDING RECOMMENDATIONS

A goal of every nation is to ensure national security, which in turn fosters a positive environment for economic performance and growth, richness of culture, and global importance. The UAE economy has prospered and has grown outside of the oilsector during the past four decades. As a result of the growth, the UAE has increasing interaction with other countries worldwide and elements of globalization have taken root within the country. Globalization has brought about changes and effects within the government and internal system of the UAE as well as the culture and society, and has allowed for the impressive economic growth, which requires the importation of labor and supports the application of cutting-edge technology in all facets of the society. Advantages and disadvantages related to globalization have a direct and indirect impact to the UAE's internal security. Thus, a government must work on ways to balance the benefits and address the challenges (Godwin, 2006). The strategic importance of maintaining internal security provides strength to the UAE government and its policies to ensure that all transactions within the country will not harm citizens and/or the welfare of the country. Because the UAE government recognizes the strategic importance of internal security and good governance, the current challenges brought about by an increasingly diversified population and the application of emerging technologies are ones that are actively engaged through the application of proactive and reactive measures.

Our research emphasized these two major threats: the UAE's multicultural population of expatriates and the influence of modern technology to the society, its culture, and its economy. There are two hypotheses in this study, these are: (1) the disproportionate number of expatriates poses a threat to the internal security of the UAE and (2) the UAE faces a number of internal security threats with the implementation of modern technology. Technology has been a part of the UAE's globalization and has facilitated innovation in the government's system. This brought improvement to trading, and the exchange of business transactions, and further interactions with other countries globally. This has a direct impact upon the UAE's influx of expatriates.

Associated with the UAE's growing global importance is the increase in resident expatriates. The nation needs the service of these working expatriates to support its manpower requirement and reinforce its existing local workforce. Related to the influx of people who are coming in and out of the country, however, is the increase of securityrelated issues that should be addressed and prevented by the government. The challenges posed by the large number of multicultural expatriates involve the real threat of backlash from workers due to the destabilization of their native countries and financial activities that are illegal, such as money laundering, that may be associated with terrorism worldwide. In general, the UAE government was ahead in proactively ensuring that threats to internal security have been halted and addressed. Specific policies that were discussed in this research involve measures pertaining to its multicultural and expatriate population (Chapter III). Various measures have been taken by the government, such as amendments related to financial transactions locally and internationally. There have also been initiatives to provide identification and citizenship to bidoons, and preventive measures have been taken to prevent illegal entry through immigration by implementing RFID and Iris scan to identify and tag visitors of the UAE. These measures can be observed to prevent terrorism and illegal activities in the nation. This thesis has emphasized that the UAE government is able to sustain security through these measures and was able to successfully implement these policies across the government and private sectors. One of the recommendations of this study is to ensure consistency in implementing these measures across the board. It is believed that consistency promotes discipline among the people and promotes respect to worldwide onlookers. In addition to consistency, continuous improvement to support and ensure internal security should be taken into consideration by the government.

With regard to threats associated with modern technology (Chapter IV), the government has been successful in ensuring internal security by placing policies to balance technology's impact on the society, the culture, and the economy. It was highlighted in this research that the government has placed policies and security measures to ensure protection from illegal activities across all transactions that the people may be involved in, some examples of which are: banking security, technology to protect people

and the UAE's transactions, and technology to improve processes across all industries in the UAE. Since technology is critical to the improvement of the UAE's economy, it was emphasized in this study how the government highlighted the importance of balancing improvement of quality of life as well as ensuring keeping cultural richness and traditions intact. It is recommended in this study that the UAE government may involve the people to actively participate in ensuring internal security in the nation. This suggests involvement of everyone with information dissemination and education of the people on the importance of balancing the impact of modern technology by weighing its benefits and preventing negative impact on the society and culture.

- Suggestions for effectively dealing with the threat of the disproportionate number of expatriate laborers, modern technology, and associated factors on the internal security of UAE are:
  - To strongly move ahead with the Emiratisation initiatives and to engage progressively in developing the nationals in line with the needs and demands of the job market by:
  - Popularizing the need for education and acquiring technical qualifications and develop passion for higher and technical education among the Emirati nationals.
  - Develop the curriculum particularly that of the higher education and technical education in such a way as to develop the needed skills for the labor market and adopt more industry-focused decision-making.
  - Make the jobs in the private sector more attractive for the nationals to develop a liking for private sector jobs since the nationals currently prefer public sector jobs.
  - Adapt the private sector jobs by introducing some of the main features that attract nationals into the public sector.
  - o Impose high values for fines for violations of the rules for expatriates and visitors as well as nationals in relation to all security policies.

- O Continue implementing the latest technological tools for making immigration processes more error free, and in addition to network databases that hold the iris scan information with other cooperative countries in order to enhance the effectiveness.
- It is also recommended that the UAE government institute a mandatory military service for all of the UAE nationals. The service would consist of two years of a National Guard service that would enhance national defense and disaster response as an additional proactive measure.

Ulrichsen (2009, p. 1) argues that a "holistic approach to security is necessary for regimes to renew their sources of legitimacy in a globalizing world of transnational flows and multiple layers of global governance." These research studies mainly investigated the influence of two factors on the internal security of the region, but as time passes there is possibility for new factors to emerge as threats and hence there is need for assessing any potential threats in the region in view to develop the right strategies for making the region more secure and stable. As ensuring optimum levels of internal security has become a necessity for governments across the world for improving the economic and social status of the region, there is need for regularly conducting studies in this regard. More in-depth studies and analyses would be very much needed for making accurate predictions related to internal security threats as well as for developing appropriate proactive strategies. Since this research study has only identified that the selected two factors influence the internal security of the UAE and the different aspects associated with it, there is need for understanding the degree of association of these two factors with that of internal security. Deeper understanding on the different factors is essential for strategizing the nation's options for dealing with the security issues and hence can form further subjects for future research. Is it possible to bring security and stability in the UAE by strategizing their options for dealing only with issues like demographics and modern technology alone?

For scope of future research, this study would recommend conducting a study on the impact of the large number of tourists who enter the UAE who are not accounted for in this study and may pose a possible threat to the internal security of the UAE. This issue is timely as the growing numbers of tourists have been so large that the government is investigating it. It was reported that in 2008, they have perceived that the number of tourists will hit 10 million in 2010 and 15 million in 2015. There was an increase of 40% percent from 2007 to 2010. In the next five years, it was forecasted to have an increase ranging from 30 to 50 percent. The most resent assassination of the Hamas leader, Mahmoud Al-Mabhouh, which occurred in January 2010 in the UAE, took place in Dubai. This event displayed the threat to the UAE internal security through tourism as the assassins operated under the umbrella of a tourist visa, but they were in fact in the country to carry out a criminal act.

In relation to future research, because the issues explored within this study associated with demography and modern technologies are closely related to globalization, the study is likely applicable to most if not all countries at varying levels. The inflow of foreign nationals into the UAE region is so intense, yet other countries such as Qatar, Kuwait, Saudi Arabia, Luxembourg, and Switzerland face similar threats at a lesser level. Rapid modes of transit, which contribute to the globalization trend, have allowed for these influxes of expatriates coming only to work and reside within the host country without gaining or seeking citizenship, to reach levels that are unique to modern times. Additionally, technology, another component part of the globalization trend, has influence over virtually all countries therefore the challenges that are inherent to the application and use of an advanced technology pose a threat to not only the UAE, but all countries that have any access to their means. The content of this thesis is likely applicable in some manner to any country's study that focuses upon contemporary challenges to internal security.

After analyzing and researching information available on the topic, we have determined that the UAE has been effective thus far in their implementation of proactive and reactive security measures. The support received from citizens and all of the country's various sectors are in one way or another upholding the policies and regulations placed by the government to promote internal security. There may be events that happened that provided the government valuable experience to increase its security in the past; this strengthens the government and its global involvement and has educated the country to implement modern technology to ensure stability and security across the

nation. This research was able to identify the threats affecting internal security in the UAE as well as identify the challenges faced by the government to address these issues. This study has provided valuable information that economic growth improves quality of life; however, it is the role of the government to encourage cultural stability, the wise use of technology, and keeping traditions alive and intact.

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# APPENDIX: UAE: THE PLACE, THE PEOPLE, AND THE GOVERNMENT

#### A. THE PLACE

The UAE is located between the 22nd and 26th degrees of latitude and the 51st and 56th degrees of longitude. The land area is about 83,600 square kilometers in addition to three nautical miles of territory (Cordesman, 1997, p. 290) and hundreds of islands. Coastal area coupled with rolling sand dunes and mountains to the east, make up the landscape of the UAE. Less than 1% of the land is arable; roughly only 2% is dedicated to permanent crops (CIA, 2009, "land"). The staple crop of the UAE is dates from the date palm. The predominate resources natural to the area are oil and natural gas. According to the UAE Embassy in Washington D.C., the UAE, as of 2009, holds "nearly 10 percent of the total world supply of proven crude oil reserves" (Embassy, "The UAE").

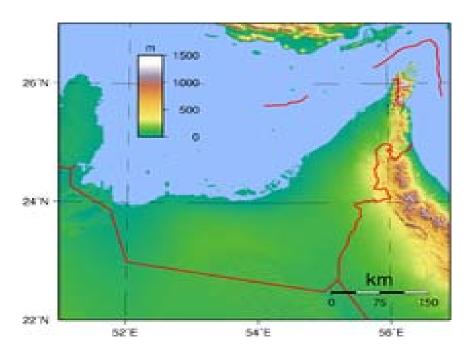


Figure 9. UAE Topographical Map (From: Wikimedia.com)

#### B. THE PEOPLE

The majority of the UAE national population is Arab, and a small percentage are families of Persian or African decent that had been living in the region predating the inception of the country. Historically the occupation of the UAE is dated back to 5500 BC (UAE yearbook, 2007, p. 10); however, the existent Arab population is traced to the migration from the southern part of the Arab Peninsula after the Great Dam in Marib collapsed. It was not until the 6th and 7th century AD that the population was in contact with the Christian and Muslim religions, specifically in 630 AD the Muslim religion was introduced to the region (UAE yearbook, 2007, p. 10) and took hold becoming an important part of the Emirati cultural heritage and modern culture.

The UAE nationals that are descendant from those Arabs that had migrated,

from the tribally structured, highly organized culture of Yemen... the new arrivals retained their tribal structures and their community-building genealogies and legends.... That sense of nationhood could be maintained throughout such a vast and inhospitable region because they all shared Arabic as their common language — a language which was to become the language of their common religion (Al Abed & Heard-Bay, 2001, p. 101).

Historically the tribes of the UAE had been established in the larger populated areas:

In the original areas of population concentration, the large oases, various tribes often lived side by side and in many issues of economic or political importance this neighbourhood became the guiding factor in the society's political life. In most villages they also mixed and mingled because one instance of inter-tribal marriage was usually the beginning of further marriages between two groups. But there were also some long-established social differences relating to the ownership of land in these oases – a kind of class distinction, where often the Bedouin absentee landlords were at the top of the social structure (Al Abed & Heard Bay, 2001, p. 101).

The landscape had much to do with the shaping of the culture in the region as well. The lives of many were spent nomadically, herding camels and sheep, "Though nomadic life resulted in a high level of illiteracy, [and] restlessness...it provided on the other hand, favorable values of hospitality, generosity, courage, honor and self-confidence" (Patai, 1983, p. 43). Along the coastal area, pearling was also a major way of life. Regardless of the location within the region, the association of the population with

their tribal ties has remained strong up until present times keeping the values of hospitality, generosity, courage, honor, and self-confidence at the forefront of their modern culture as they move forward and remain mindful of and active in cultural activities.

European contact did not occur until the 16th century (UAE yearbook, 2007, p. 11). The Portuguese had established a fort in Kalba, and later the British, Dutch, and Venetians came in contact with the Arabs native to the UAE (UAE yearbook, 2007, p. 11). There was little to no effect of the contact in imposing European influence upon the culture; "before the advent of oil, the entire population formed one homogenous society" (Al Abed & Heard- Bay, 2001, p.114). The British became the most involved due to the trade route to India; however, their contacts were limited as well. During the time that Europe was in contact with the area, the UAE became known as the Truical or Pirate Coast.

#### C. THE GOVERNMENT

#### 1. Traditional

Throughout the 1,400 years of the Islamic era the tribal government retained its character despite the invasions of outsiders, who brought quite different cultures but made little if any impact on the way of life of the inhabitants. These tribal governments were comprised of

...a nested set of kin groups, ranging from very small to very large. These groups are vested with responsibility for the defense of each member and responsible for harm any member does to outsiders... Balanced opposition is a 'tribal' form of organization, a tribe being a regional organization of defense based on decentralization and self-help. (Salzman, 2008, p. 24)

A sheikh traditionally was the leader of an Emirate. They were from the most powerful tribe. Within each tribe, sub-sections often existed wherein another sheikh was present to maintain power over the smaller sub-section. The ruling families, or specifically the sheikh, were able to maintain "their authority only insofar as they were able to retain the support of their people" (UAE yearbook p.46). Majlis were "in essence a form of direct democracy," these open forums for the people (tribesmen) to meet with

their sheikh were held frequently (UAE yearbook p. 46). Tribal leadership among the seven separate Emirates was and is controlled by the following familes: Al Nahayan family of Abu Dhabi; Al Nuaimi of Ajman; Al Sharqi of Al Fujayrah; Al Maktum of Dubai; Al Qasimi of Ras al Khaymah and Sharjah; and Al Mualla of Umm al Qaywayn.

#### 2. The Formation of the United Arab Emirates

It was in 1971, three years after the British announced that they would cease the enforcement of the treaties that had repressed the region, that six of the seven separate Emirates came together and became unified under the central government of the UAE. The seventh Emirate joined the others a year later. The rulers came together

...to agree on the forms of government for their new federal state[;] they deliberately chose not simply to copy from others but, instead, to work towards a society that would offer the best of modern administration, while retaining the traditional forms of government that, with their inherent commitment to consensus, discussion and direct democracy, offered the best features of the past. (UAE yearbook p. 47)

Sheikh Zayed Bin Sultan Al Nahayan is contributed to having initiated and solidified the new country and became the first president of the UAE. It was with his foresight that the government blended the desire to maintain traditions and to become an ever progressive and modern state of power. Through such means as the majlis, which are still in place within each of the Emirates, "the well-tested traditional methods of government in the United Arab Emirates have been able to retain both their essential relevance and unique vitality, and they continue to play an important role in the evolution of the state today" (UAE yearbook p.47). The United Arab Emirates was officially formed on December 2, 1971.

#### 3. Political Infrastructure

#### a. The United Arab Emirates

The UAE has successfully formed a modern political structure infused with regional traditions. This blend is seen in the structure of the UAE government as well as in their policies. The federal government, in keeping with the traditional open line

of communication as seen in the majlis, publishes their strategies and visions for public review. The following is a brief description of the positions within this structure and their basic responsibilities therein:

The Federal Supreme Council is made up of the rulers from each of the seven Emirates. The Supreme Council is the highest constitutional, legislative, and executive authority, which is responsible for drawing up the general policies, approving the various federal legislations as well as the power to elect (for five year terms) both the President and Vice President from within their numbers. The Council is convened whenever it is requested by any of its members. Each Emirate has one single vote in the council resolutions and deliberations (uaecabinet.ae, 2010, "The Supreme").

**The President** is elected every five years by the Supreme Council. An abbreviated listing of his responsibilities is as listed in uaecabinet.ae (2010):

- 1) Head the supreme council and manage its discussions;
- 2) Call for a joint meeting with the supreme council and federal cabinet whenever necessary;
- 3) Sign and issue federal laws, decrees, and decisions endorsed by the supreme council;
- 4) Appoint the prime minister and the deputy prime minister;
- 5)Appoint the diplomatic representatives for the federation in the foreign countries and other senior federal, civil, and military staff except for the president and the judges of the supreme federal court;
- 6) Supervise the execution of federal laws, decrees, and decisions through the federal cabinet and competent ministers;
- 7) Represent the federation inside the country and abroad and in all international relations; [and]

8) Exercise the right of amnesty or reduction of penalty and approve the capital sentences in accordance with provisions of the constitution and federal laws.... ("President").

**The Vice President** performs all responsibilities of the UAE president in the latter's absence for any reason. This is similar to the position of the **Deputy Rulers** who perform in the absence of their Emirate's ruler; otherwise, they observe meetings and occurrences to keep up to date on issues.

The **Prime Minister's** responsibilities are empowered by the UAE Constitution:

- 1) Responsible in front of the President of the UAE and the Supreme Council for execution of the General Policy of the Federal Government inside and outside the UAE:
- 2) Supervises the coordination of work among the various ministries and executive federal government entities, providing directives to ministers particularly on matters affecting the government's general policy;
- 3) Calls for convening the Cabinet, administers its discussions, and monitors the activities of ministers; [and]
- 4) Presides over the Cabinet Sessions (uaecabinet.ae, 2010, "Prime Minister").

The Council of Ministers (Cabinet) is made of the Prime Minister, two deputies, the ministers of the UAE, and an active General Secretariat. The Cabinet is the executive branch of the federation, which "handles the execution of all internal and external affairs related to the federation as per the UAE constitution and the federal laws, under the supervision of the President and the Supreme Council" (uaepm.ae, 2010, "Prime Minister"). In addition, there are 19 separate Ministry divisions focusing on areas relevant to our discussion such as the Ministries of Defense, Interior, Labour, and Social Affairs.

The **Federal National Council** "has both a legislative and supervisory role, and is a member of the International Parliamentary Union, as well as the Arab

Parliamentary Union." The members are elected by a ruler-selected electoral college, as described in uaepm.ae (2010):

...eight each for Abu Dhabi and Dubai, six each for Sharjah and Ra's al-Khaimah, and four each for Fujairah, Ajman and Umm al-Qaiwain...The members of each electoral college then elect half of the FNC members for their emirate, with the remaining half being appointed by the ruler... Introduction of indirect elections is considered to be the first phase of a process designed to enhance the role played by the FNC in government. Other steps include a strengthening of the legislative and legal powers of the FNC and the development of more effective and more viable channels of coordination between the FNC and the executive authorities, such as the Cabinet (uaepm.ae, 2010, "FNC").

The **Federal Judiciary** includes the Federal Supreme Court and Courts of First Instance. The Federal Supreme Court "consists of five judges appointed by the Supreme Council of Rulers. The judges decide on the constitutionality of federal laws and arbitrate on inter-emirate disagreements and disputes between the Federal Government and the emirates" (Yearbook, 2008,p 37).

The **Local Government** parallels and is interlocking with the federal institutions.

Each of the seven emirates also has its own local government. All have expanded significantly as a result of the country's growth over the last 36 years, though they differ in complexity from emirate to emirate, depending on factors such as population, area, and degree of development (Yearbook, 2008.pp 37-38).

## b. A Secure Country

Within the UAE, the internal security is dealt with by a number of organizations. The **Ministry of Interior** oversees the UAE federal police functions. In addition, each Emirate has its own police force in addition to a federal policing force. The Ministry of Interior oversees immigrations within the UAE. The **Ministry of Labour and Social Affairs** oversees relations regarding the expatriate labor force. Similar to the United States, the UAE maintains its own department overseeing homeland security, The

Critical National Infrastructure Authority (CNIA). It "works with other government authorities and security forces, such as the UAE Armed Forces, to establish and implement a unified protection plan for the security of the Emirate's resources" (CNIA, 2010). In addition, the UAE has formed a Supreme National Security Council, chaired by His Highness Sheikh Khalifa bin Zayed Al Nahyan, President of the United Arab Emirates and Ruler of Abu Dhabi. "The Council has responsibility for providing ongoing planning and coordination of different government departments across the United Arab Emirates to ensure continued safety for the Nation in a coordinated way" (The Executive Council, 2007).

Since its inception, the UAE has enjoyed relatively low crime rates. The major sources of concern for the UAE security, according to the Overseas Security Advisory Council (OSAC) '2010 Crime & Safety Report,' are in line with the discussion within the following chapter. The Report states that

...mundane/petty thefts occur often, especially within the large expatriate workforce that accounts for 80 percent of the population... While violent crimes and crimes against property are rare, they do occur...Reported crimes, to include homicides, tend to be within the expatriate population which is predominantly South Asian (OSAC, 2010, "Abu Dhabi").

The Report continues to note however that the large expatriate country is generally law abiding, as they fear deportation or legal ramifications for their actions. It is also noted that the regional security poses a threat to internal security of the UAE as does general drug-related activity that is often associated with the Omani border (OSAC, 2010, "Abu Dhabi").

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